Cycles of opportunity? The significance of cycling cultures on cycling practice:
The case of Newcastle upon Tyne 1982 - 2017

Rorie Arran Parsons

A thesis submitted to Newcastle University for the degree of Doctor of Philosophy in the Faculty of Humanities and Social Sciences

School of Architecture, Planning and Landscape

October 2019

Abstract

Mainstream contemporary travel in the UK is dominated by a system of automobility with sustainable forms of mobility such as cycling largely marginalized. In response to a widely perceived imperative to grow cycle use due to its health and ecological benefits in particular, transport policy and planning has focused on individual choice, thus relying upon psychological models of behaviour change.

This thesis adopts a more sociological view of understanding behavioural change. It mobilises practice theory to explore how the 'social sites' of cycling contribute to cycling practices. Utilising a case study methodology, the activities of three advocate groups of cycling ('social sites') in Newcastle upon Tyne, England are critically examined: Tynebikes, The Cycle Hub and Newcastle Cycling Campaign. The research uses qualitative data from ethnographic observations, semi-structured interviews, and document analysis.

It is evident that whilst all social sites advocate for cycling, they differentiate in ways that reflect practice theory's elements of meanings, materials and competences. As a result, it identifies that social sites contribute to various local trajectories of cycling practice. The emergence of new elements introduced by social sites refers to cycling practices being born through a process of re-crafting. Particularly in regards to campaigning practices, the introduction of these elements also highlight the decline of other particular performances of cycling. In popularising existing elements, current and locally situated cycling performances persist, largely through the development of communities of practice. While the innovative combination of existing meanings, competences and materials in new ways relates to attempts to grow cycle usage.

This thesis therefore highlights the significance social sites play in affecting future trajectories of cycling. Cycling social sites both widen and restrict cycling practices through the performances they intentionally and unintentionally reproduce and circulate, and thus contribute to the birth, growth, maintenance and potential decline of cycling practices. This finding is important for advocates and policy-makers looking to promote cycle usage.

[This page is intentionally left blank]

Acknowledgements

First and foremost thanks must go to the Economic and Social Research Council for the funding that has enabled me to complete both my masters and doctoral research at Newcastle University (1344934).

I must thank all the research participants who took the time to share their thoughts, views and experiences on the research topic. I am very grateful of former members of Tynebikes providing me with valuable archival material that has contributed significantly to this thesis. Thank you to Newcastle Cycling Campaign for allowing me to attend meetings, social gatherings and informal chats. And thank you to The Cycle Hub for letting me carry out ethnographic observations at the café and engage with the sessions held there. Finally, thank you to the wider cycling community in Newcastle, to all those other meetings, gatherings and events of which I was able to be a part of, these were truly invaluable moments.

The thesis itself would not have been possible without the time and effort of my supervisory team: Professor Geoff Vigar and Dr Andrew Law. Their help, advice and guidance throughout the research process has enabled me to create something that I thought would not be possible. I am particularly appreciative of their support when times were difficult and helping me to overcome numerous hurdles in my research and the pressures that came with this. The ability to share their own experiences provided a calming reassurance and positive impetus to continue with the work.

Again, I must thank both the Economic and Social Research Council and Newcastle University for providing me with the opportunity to study abroad with the Beyond Behaviour Change research programme at Royal Melbourne Institute of Technology University. This provided a catalyst for my research in the understanding and use of practice theory. Thank you Dr Cecily Maller, Dr Crystal Legacy, and Associate Professor Yolande Strengers for supporting me whilst there and enabling me to think more critically when using practice theory.

I'd like to thank the wider School of Architecture, Planning and Landscape and the Faculty of Humanities and Social Sciences at Newcastle University for the countless lectures and seminars, which assisted my development throughout my postgraduate

Table of Contents

List of Abbreviations

ABC	Attitudes, Behaviour, Choice
AGM	Annual General Meeting
ANWB	Nederlandsche Algemeene Wielrijders Bond
A.T.B	All Terrain Bike
CCAF	Cycle Cities Ambition Fund
CF	Society for Promotion of Cycling in Sweden (Cykelfrämjandet)
CTC	Cyclists' Touring Club
DFT	Department for Transport
EU	European Union
FOE	Friends of the Earth
GHG	Green House Gas
LCDS	London Cycling Design Standards
NCN	National Cycle Network

ONS	Office for National Statistics
SCR	Strategic Cycle Route
SPACE	Safe Pedestrian and Cycling Environment
TAG	Technical Advisory Group
UK	United Kingdom
WCED	United Nations World Commission on Environment and Development

List of Figures

[This page is intentionally left blank]

1 Introduction

1.1 Setting the Scene

It is evident that at the beginning of the twenty-first century, challenges of global warming are at the forefront of issues facing the world. The world's climate is changing and the process of global warming needs to be moderated and if possible stabilized (Banister, 2005). For this there need to be a significant reduction in carbon consumption, as it is the use of these resources that are the principal cause of global warming. Since the Brundtland report infamously stated the importance to make development sustainable and to "ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987), sustainable development has been utilised by researchers, academics and decision-makers interested and involved in the environment.

Between 1990 and 2016, Green House Gas (GHG) emissions have seen a 41% decrease in the UK (ONS, 2018), whilst in the EU-28 countries this has by 22% (Eurostat, 2017). Yet, whilst this may sound positive and progressive, certain sectors fail to reflect this reduction in GHG emissions. 26% of GHG emissions in the UK were emitted by the transport sector, becoming the largest sector ahead of Energy Supply (25% in 2016). Whilst, transport accounts for 23% of the total GHG emissions of the EU-28 in 2015, up from 15% in 1990 (Eurostat, 2017). These increases in sector share are not a result of other sectors reducing their GHG output, but rather, both the EU-28 and UK transport sectors increasing its total output. Emissions of carbon dioxide by the transport sector in the UK increased significantly from 80 million tonnes carbon dioxide equivalent in 1970 to 124.4 million tonnes carbon dioxide equivalent in 2016.

For many, travel and everyday mobility is generally considered mundane and a means to an end when commuting, travelling for business, taking children to school or more optional trips such as shopping, leisure, or pleasure. Yet transport is key in ensuring efficient operation of the wealth-creating activities, as well as enabling access to those spaces which contribute towards social well being (Banister, 2005). As a result

reducing travel-related emissions is a vital step in moving towards a more sustainable, lower-carbon based society (Hui, 2013).

1.1.1 System of Automobility

Whilst in theory there exists alternatives to the car for transportation, the car has become the icon of the twentieth century (Banister, 2005) creating an experience and environment in which other, more environmentally sustainable mobility practices are deemed unacceptable in comparison to the 'system of automobility' (Urry, 2004). In referring to a 'system', we refer to the patterned and structured manner of a range of social developments that have reinforced one another to make both the automobile possible and necessary (Bohm et al., 2006). Urry's 'machinic complex' refers to the conditions of not only individual but mass automobile use in which "road building and maintenance, traffic regulations, parking arrangements, insurance, criminal justice systems, healthcare, pollution control rules and mechanisms, forward and backward economic linkages (from oil production to garages to maintenance of cars)" serve as elements in with this complex has emerged (Bohm et al., 2006, p.5).

A number of antagonisms exist within the current regime of automobility relating to its ecological sustainability. Automobile use significantly contributes to three principal forms of environmental degradation: the depletion of non-renewable resources, oil, rubber, platinum, lead, aluminium and iron; the generation of a range of pollution problems including air pollution, acid rain, global warming, and water pollution (from road building and run-off); as well as dominating space (predominantly urban space) causing radical re-organisation of urban space, displacing land from other uses and essentially transforming the car from a choice to a necessity in order to access the displaced spaces (Bohm et al., 2006, pp.9-10).

The car is a particular mobility in social life, which has a distinct combination of flexibility and coercion (Sheller and Urry, 2000). As Urry (2004, p.28) explains "cars extend where people can go and hence what they are literally able to do". Maintaining the 'freedom' and flexibility of the motorist has therefore become a critical societal need in which to maintain everyday life. Heavily quoting both Urry (2004, pp.25-26) and Sheller and Urry (2000, pp.738-739) the car is commented to reconfigure urban life enforcing its dominance through six interlocking components in which

'automobility' generates "distinct ways of dwelling, travelling and socializing in, and through, an automobilized time-space" (Sheller and Urry, 2000, p.738):

1. The quintessential manufactured object produced by the leading industrial sectors and the iconic firms within twentieth-century capitalism (Ford, General Motors, Rolls-Royce, Mercedes, Toyota, Volkswagen and so on); hence, it is the industry from which key concepts such as Fordism and post-Fordism have emerged to analyse the nature of, and changes in, the trajectory of western capitalism.

2. The major item of individual consumption after housing which (1) provides status to its owner/user through the sign-values with which it is associated (such as speed, home, safety, sexual desire, career success, freedom, family, masculinity, genetic breeding); (2) it is easily anthropomorphized by being given names, having rebellious features, being seen to age and so on; and (3) generates massive amounts of crime (theft, speeding, drunk driving, dangerous driving) and disproportionately preoccupies each country's criminal justice system.

3. An extraordinarily powerful complex constituted through technical and social interlinkages with other industries, car parts and accessories; petrol refining and distribution; road-building and maintenance; hotels, roadside service areas and motels; car sales and repair workshops; suburban house building; retailing and leisure complexes; advertising and marketing; urban design and planning; and various oil-rich nations.

4. The predominant global form of 'quasi-private' mobility that subordinates other 'public' mobilities of walking, cycling, travelling by rail and so on; and it reorganizes how people negotiate the opportunities for, and constraints upon, work, family life, leisure and pleasure.

5. The dominant culture that sustains major discourses of what constitutes the good life, what is necessary for an appropriate citizenship of mobility, and which provides potent literary and artistic images and symbols.

6. The single most important cause of environmental resource-use resulting from the exceptional range and scale of material, space and power used in the manufacture of cars, roads and car-only environments, and in coping with the

material, air quality, medical, social, ozone, visual, noise and other consequences of pretty well global automobility.

The key to the dominance of the car is not the car itself but these elements combined that constitute the system (Dennis and Urry, 2009). The systems of provision and categories beyond this materialise into stable forms, generating distinct affordances for the car driver, which has been systematically locked into the organization of society (Shove et al., 2012; Urry, 2004). Urry (2004) refers to this as a non-linear system or complexity in which it generates the preconditions for its own self-expansion. Elements of this automobile system include "cars, car-drivers, roads, petroleum suppliers and many novel objects, technologies and signs" (Urry, 2004, p.27; Sheller and Urry, 2000). All elements are needed and used as a unit of the system and are produced as a unit by the system itself. As a result contemporary 'global cities' and cities in general still remain rooted and defined by automobility (Sheller and Urry, 2000).

Automobility enables spaces of sociality to be displaced away from one another, transforming time-space scapes within the modern city. As a result, socialities and territories of family life, community, business and leisure have been unbundled from what was historically integrated and compact (Urry, 2004). These socialities that exist in time and space are interwoven and juggled through the use of the automobile in order to deal with the temporal and spatial constraints that it itself generates (Urry, 2004; Sheller and Urry, 2000). Urry (2004, p.19) extends the system of automobility:

> "Divides workplaces from homes, producing lengthy commutes into and across the city. It splits homes and business districts, undermining local retail outlets to which one might have walked or cycled, eroding town-centres, non-car pathways and public spaces. It separates homes and leisure sites often only available by motorized transport."

Within this socio-technical system, the car enables a level of freedom, 'freedom of the road', in which the ability to travel at speed, whenever during the day/night and in any direction in relation to the complex infrastructural provision of roads and motorways. Sheller and Urry (2000) therefore assert that automobility coerces people into this intense flexibility in which 'fragments' of time and space are juggled forming

4

complex but fragile patterns of social life, which only the car can fulfil. Banister argues that even if technological innovation permits the development of the eco-car, this still does not provide a solution to the problem of the considerable energy tied up with the production over the life of the vehicle (2005, p.7). Innovations such as the electric car relates to what Bannister considers as not providing solutions, but merely perpetuating and maintaining the entrenchment of the car-system. GHG emissions may be removed from the exhaust pipe, but energy to power such vehicles are still predominantly using non-renewable energy sources and energy demand is still required in the construction of such vehicles.

1.1.2 *Sustainable Transport Cities*

For Banister, "the only solution to sustainable transport in cities is to push hard on a low technology alternative that has a reduction of car ownership at its centre, so that individuals voluntarily give up" (2005, p.7). This thesis takes the view that mobility is essential to current lifestyles and the patterns of production and consumption and sustainable development can only be achieved through less travel and better travel (Banister, 2005). Transport is integral in shaping the sustainable city and whilst existing cities have structured themselves around the use of the car, this thesis seeks to explore the role of cycling as transport in changing the direction of sustainable transport development.

Whilst everyday travel and mobility is considered routine, unremarkable and collecting accurate information on such behaviour is difficult, The British National Travel Survey provides a robust overview of travel patterns in Britain (Pooley et al., 2013). Cycling levels have largely remained stagnant since 1995/97, with 1.5-2% of all trips per person cycled, equating to 1% of the overall distance travelled by an individual in 2014 (Gov.uk, 2018). In comparison, travel by automobile (considered to be both 'car/van driver' and 'car/van passenger statistics') contributed to on average, 64% of all travel and 78% of the overall distance travelled by an individual. 82% of cycling trips are between 0-5 miles, whilst 57% of car travel takes place within this distance frame too. As a result only 2% of trips between 0-5 miles occur by bicycle, a figure that is dwarfed by a car percentage of 56%. While The British National Travel Survey does not identify cycling trips that are less transport related

and more leisure based and may not provide the complete complexity of all journeys in that some maybe multi-modal in nature (Pooley et al., 2013), it does reveal that the car dominates everyday travel in England. Thus, forms of mobility such as the bicycle, whilst championed, as a sustainable mode of transport, especially for short journey types, still remains marginalized and less important by trip users.

Whilst many cycling related organisations have sought to protect and promote cycling over the years including Sustrans, Cycling UK (Formerly the Cyclists' Touring Club), Cycling England, Cycling Embassy of Great Brtiain, Cycle Training UK, and The Bicycle Association, significant increases have occurred in a number of places such as Bristol and Hackney (see Aldred and Jungnickel, 2014), yet there is little evidence to suggest cycling levels have increased nationally. Whilst it is commented these campaign groups have been successful in influencing government policy on cycling and thus leading to worthwhile interventions, there somewhat remains large contradictions in British government transport policy. Whilst successive governments state their support for sustainable mobility, there has been little action to restrict car use and the dominance of the car with its close association and interconnection to economic prosperity (Pooley et al., 2013).

Pucher and Buehler's (2010) research on walking and cycling for healthy cities reveals that these two active methods of transportation attribute to more than 30% of the modal share in nations such as Finland (31%), Sweden (32%), Germany (34%) and Denmark (34%), whilst in the Netherlands this figure is much higher at 51%. For England, active travel accounts for 24% of all trips taken in 2014, 2% cycling and 22% Walking. This may not seem too distant from those of the north-west European nations and it is indeed higher than that of the USA (12%) and similar to other European nations of Belgium (24%), France (25%), Austria (25%) and Norway (26%). But the critical difference between England and these higher users of active transport is the use of the bicycle. Whilst walking trips are similar to England's, cycling rates are considerably higher in these north-west European nations with the majority on them being 9% and 10%, whilst Denmark and the Netherlands report considerably higher cycling rates of 18% and 26% respectively.

With the enormity of opportunity to increase cycle usage in England thus culminating in such health, social and ecological benefits the main question of the research is to examine how such current cycling cultures are born, grown, maintained and possibly decline into extinction. Historically, the bicycle has been designed out of city plans and marginalized throughout the twentieth-century as a result of the car-system. Conceptualizing why people cycle within a car dominated society has become of critical importance leading to generalizations of cycling culture present in Britain today. This overarching question is contributed to by an underlying question of how significant current cycling cultures are contributing to the growth of cycling usage in England. As Cox reflects in the introduction to his edited book 'Cycling Cultures', maybe it should be more accurately considered 'cyclings' rather than cycling, in that cycling is not a unified and singular practice but contributive of a series of cultural practices (2015, p.4). There are a diversity of cycling practices, most often considered as based on a variety of activities and behaviours which I consider here as variants of cycling practice.

1.1.3 Understanding Travel Behaviour

In critiquing the neo-liberalist approach of individual choice and behaviour, which is regularly used in response to the challenges that we often face today, behavioural theories have come under pressure in its impact and ability to enable change towards more sustainable methods of transportation. This is true for cycling and mobility practice, with much of the focus emphasizing the attention on individual choice determined by economic incentives, attitudes, knowledge and social norms amongst others. Climate change isn't purely a 'scientific' problem with human actions central to the apparent warming of the planet. Whilst such warming will only be slowed down if 'humans' begin to behave differently, such an issue has been predominantly framed in an 'economic' light (Urry, 2015). Its grasp on the issue has led to a monopolisation upon the understanding and debate on the issue with "a focus on human practices as individualistic, market-based and calculative, and thus generated responses to climate change based on individual calculation to change behaviour, new technologies to fix the problem and developing markets for novel 'green products'" (Urry, 2015, p.46).

However, the profound limited success of travel interventions, in particular the attempt to encourage cycling leads to a critique of framing the issue in this manner. It is argued that the suite of interventions including education, persuasion and economic incentives that have been informed by this neo-liberalist direction in UK policy remains heavily individualistic. A transition to employing practice theory as a framework to explore aspects of cycling culture over that of more traditional behavioural frameworks has been evident in recent times (see Larsen, 2017; Cass and Faulconbridge, 2016; Spotswood et al., 2015; Latham and Wood, 2015; Nettleton and Green, 2014; Aldred and Jungnickel, 2014; Aldred and Jungnickel, 2013; Wood, 2010). Meanwhile, practice theory academics themselves have utilized cycling and the wider field of mobility in regards to sustainability and transitions to a decarbonized transport system to explore and conceptualize the dynamics of social practices (see Spurling and McMeekin, 2015; Shove et al., 2012; Watson, 2012; Shove and Walker 2010).

According to practice theories, action and behaviour reflects the performance of a practice, conceived by forms of bodily and mental activities; 'things', objects and their use; background knowledge in the form of understanding and know-how; and the states of emotion and motivational knowledge attached to such practices (Reckwitz, 2002, p.249). As a result, practice theories theorize individuals as 'carriers' and 'hosts' to such practice (Shove et al., 2012; Reckwitz, 2002). Practice theory therefore takes the focus of analysis away from the individual whereby action and behaviour is not assumed to be the result of an individual's choice but is instead situated within current organized nexuses of actions (Schatzki, 2002). Schatzki clearly distinguishes that "a practice is a set of individuals' actions, but not a set of actions defined by reference to individuals alone" (2008, p.106). Rather than taking an interest to understand what practices of cycling say about a person then, it is important to conceptualize how meanings associate to the practice and circulate between practices, therefore combining or connecting with, or break away from other symbolic constructs (Shove et al., 2012, p.54). As a result it reduces the over emphasis of individualism as a driver of change and instead locates this opportunity of change within social practices (Hargreaves, 2011; Warde, 2005).

Theories of practice have long been criticized for their perceived repetition and reproduction of practices without acknowledging or conceptualizing the potential of understanding change and dynamics of practices. Most notably Shove et al. (2012) and Watson (2012) attempt to dispel such criticism, introducing a number of metaphors, which help to build on the foundational constructs of practice theory. This theoretical perspective and conceptual understanding of trajectories of practice will assist in investigating how such cycling cultures as particularized variants of cycling practices contribute to and enable the enrolment, maintenance, persistence or potential decline of others/carriers into such practice careers.

1.2   Research Aims, Objectives and Questions

Given the widely perceived imperative of growing cycle use in the UK, due to its health and ecological benefits in particular, transport researchers have recently applied their attention to the significance of local cycling cultures in accounting for differences in cycle usage between neighbourhoods and cities (Aldred, 2012a; Pooley et al, 2011). The mundane nature of cycling in Britain outside cities that experience levels greater than a 5% cycle share are rarely considered, and when they are these examples are reviewed to see why there is a lack of people who cycle. Therefore, we miss a critical group that ultimately informs the large majority of cycling in Britain, the marginalized cyclist in the automobile city. This research subsequently contributes to helping understand cycling culture as a practice. Shining a lens in a positive manner to reveal the complexity and variety of cultural practices that still exist in these spaces is significant in understanding the potential consequence of future cycling cultures, as their contribution to the practice of cycling informs the trajectory of cycling practices. This research focuses on a broad historical context of Newcastle upon Tyne, England that allows comparisons to be made between historical and present interventions in cycling practices.

As a result, the research seeks to answer three key aims. First it is necessary to establish how sustainable methods of transport such as cycling are being structured, promoted and developed in Britain. Secondly, in considering how cycling practices are perceived by existing cycling cultures, there is a need to assess the subsequent trajectories these cultures enable and the subsequent potentiality of cycling futures as

an urban mobility. Utilizing practice theory as a theoretical framework, the research aims to better understand the contribution of cycling cultures and their attempts of benefitting cycling practices through their interventions. These two aims can therefore be translated into the following research questions:

1) To assess how cycling social sites contribute to cycling practices and forms of cycling culture.
2) To formulate an understanding of how cycling social sites affect trajectories of cycling, with particular awareness to how cycling cultures may be born, grown, maintained and possibly decline.
3) To review the value and contribution of practice theory as an analytical framework in cycling research.

1.3   Structure of the Thesis

Following this introduction chapter, the thesis has been structured into nine chapters. Chapter 2 introduces the theoretical approach to the research. Through the review of existing literature, practice theory is split into three distinct sections. The first part introduces and defines practice theory drawing upon the varied interpretations of practices before identifying Shove et al.'s (2012) three-element configuration of materials, competence and meanings, which emphasises a generalised structure to practices in recent times. This section is further enhanced with discussions on practices as both entity and performance, before drawing to attention the role of communities of practice and the role of practices configuring systems of practice. The second part of the chapter acknowledges the role of practice theories moving the social beyond reductionist individualism, which many behavioural theories emphasise, advocating that the site of the social lies within practices rather than individual human beings. Lastly, the trajectories of practices section seeks to rebut common critique of practice theory in regards to its static nature of analysing social practices by arguing that practice theory can map and illuminate how practices alter and change through the introduction of a number of metaphors and processes which evidences the trajectory of practices.

Chapter 3 reviews current literature specific to cycling identities and cycling culture. The chapter begins by exploring performances and practice of cycling. Horton et al.'s

(2007) comment that cycling is many things in both different spaces and over different courses of time is apt, with the chapter outlining that cycling isn't a uniformed and homogenous practice, but rather a diverse and contested practice formed of various performances, both similar but also diametrically opposed or in conflict. Understandings of fear and stigma associated to cycling are also discussed with a particular emphasis of showing that cycling can be performed differently according to the knowledge and understanding of cycling, material arrangements present and meanings used. The second part of the chapter moves beyond performances of cycling and considers the role or broader practices associated to the production and development of cycling. This draws upon social practice theory's 'system of practice' outlining that the system of automobility remains a dominant and obdurate system in which the practice of cycling remains marginalised and outmoded. The final part of the chapter considers social practice theory's 'community of practice' in regards to how the advocacy and activism of local cycling culture may structure and circulate particular elements of cycling. The first section of the chapter discusses particular methods of engagement by cycling campaigns, whilst the second section highlights how such groups advocate for particular performances of cycling, particularly in regards to the vehicular cyclist and separated cycle infrastructure. The third and final section refers to a number of physical spaces *of* cycling, which contribute to and popularise particular understandings and performances of cycling.

Chapter 4 will recap on the research aims and questions of the research before going on to detail both the research approach and methodology. The research follows a qualitative rationale in wishing to assess and conceptualise the social phenomenon of cycling cultures. The research utilises a case study approach of Newcastle upon Tyne, focusing upon three particular social sites of cycling (both historical and contemporary), demonstrating how cycling cultures are evident and established in cities which are somewhat 'ordinary' and representative of a somewhat unfavourable national context to cycling. The methods of data collection are explored and outlined arguing that methodological triangulation of an ethnographic approach, semi-structured interviews and the review of official documentation where possible enabled a more holistic presentation of cycling culture within Newcastle. A thematic data analysis approach alongside the use of practice theory (as outlined in Chapter 2) was utilised to provide an analytical framework. As a result of the data collection methods

it is important to reflect on the fieldwork journey in regards to the role I played as a researcher. Issues of working in the same community, being perceived as a 'cyclist' by others and the perils of researcher bias are explored before finally outlining and identifying ethical considerations relating to the challenges of maintaining anonymity of participants whilst involved in a field of cycling where knowledge of one another was already obvious.

Chapter 5 serves as a context chapter to the empirical chapters, which subsequently follow it. Here I provide an opening piece on Newcastle's cycling culture in which I introduce the three social sites: Tynebikes, Newcastle Cycling Campaign and The Cycle Hub, alongside various other cycling social sites. The aim of this chapter is to familiarise the reader with the case study environment of Newcastle-upon-Tyne, referring to Newcastle's: cycling modal share; cycle routes and paths; historical policy, strategy and investment into cycling; cycle campaigning; cycle clubs; cycle businesses; and mass-participation cycle events.

Chapters 6, 7 and 8 present the empirical material from the three social sites as identified in the Methodology chapter. In chapter 6, I introduce the first of two cycling campaigns, Tynebikes. Referring to a historical social site, Tynebikes was both an advocacy group promoting cycling as well as a political group, which lobbied for the improvement of cycling infrastructure. The first section of the chapter provides a short historical introduction to Tynebikes, establishing key dates and activities held by the group. The second section explores the meanings Tynebikes associated to the practice of cycling, with their use of leisure rides into the countryside relating significantly to performances of cycle touring and cycle-leisure. Section three explores Tynebikes campaigning approach which relied heavily on legitimising cycling, with Tynebikes approach heavily focused on representing existing cyclists. This is expanded upon further in section four with the exploration of what material infrastructure was campaigned for. Whilst the 1980s focused on improving dangerous road intersections by transferring cycling to the footway and sharing pedestrian space, the 1990s attempted to reassert cycling's place on the road, acknowledging that too much of the city space was being attributed to motor vehicles. Finally the fifth section refers to Tynebikes as a community of practice. It is evident that their rides, meetings

and newsletters attempted to share and distribute knowledge among members and build a community of practice.

Chapter 7 introduces the second cycle campaign, Newcastle Cycling Campaign. It is argued throughout the chapter that rather than contributing to existing performances of cycling, Newcastle Cycling Campaign are focused on the alteration of cycling performances and therefore engaged at a practice-as-entity level. The first part of the chapter provides a short historical introduction to Newcastle Cycling Campaign, establishing the formation, goals and aims of the social site. The second section explores meanings the campaign ascribed to the practice of cycling. Here I associate their meanings of cycling to Lefebvre's right to the city, representing a socially just practice. The third section explores the campaigns 'council facing approach' of maintaining a strong lobbying stance and an 'expert' group in attempting to alter practices within the city council. Finally, section four refers to what Newcastle Cycling Campaign define as suitable cycling infrastructure. For them, it is necessary to over-design quality than to use timid half-hearted interim solutions. Therefore, Newcycling are clear in defining that separated and protected cycle infrastructure on a network scale is necessary at the expense of car space. It is their intention that such transference of space from cars to cycling would weaken practices of driving whilst benefitting practices of cycling, thus creating a more equitable mobility network.

Chapter 8 introduces the third and final social site, The Cycle Hub. The chapter argues that The Cycle Hub contributes to cycling performances of a leisure based and recreational kind, through the various services it offers, particularly in relation to its café and social rides, as well as its location being on the National Cycle Network. The first section on the chapter provides a broad introduction to The Hub, briefly touching upon the various elements of the cycle café, along with situating the cycle café geographically. The second section explores The Cycle Hub as a cycling café, highlighting that it introduces new users to cycling through the normality of a café space. The Hub is regularly used by customers who do not cycle, yet it is contended that the cultural architecture engages them with cycling in the attempt of normalising the practice and thus making existing cycling culture more accessible for future cycling individuals. The third section will explore cycling performances popularised by The Cycle Hub through the hosting of British Cycling Rides. Most notably these

cycling performances referred to meanings of health and social wellbeing whilst also enabling individuals to learn to ride competently. I argue however that the rides relied predominantly on the National Cycle Network to maintain performances of cycling and as a result riders had a lack of understanding and experience of road infrastructure. Finally, the fourth section highlights The Cycle Hub being purposely located on the National Cycle Network in order to provide for existing long distance cycling 'local riders' using it for leisure, whilst also training new cyclists on the network.

Chapter 9 draws upon the empirical material presented in the previous three chapters and the theoretical framework of practice theory outlined in Chapter 2 to explore trajectories of cycling practice. Split into four sections, the first focuses on how cycling practices are born, referring particularly to processes of building practices. Based on the empirical chapters of both Tynebikes and Newcastle Cycling Campaign, the importance of introducing new elements into existing cycling practices to promote cycling is highlighted. In order to create new forms of cycling, interventions require a process of 're-crafting' existing elements. This also draws to attention the potential decline and fossilization of cycling performances as well as the importance of the wider system of practice in contributing to new practices being formed. The second section of the chapter introduces the process of recruiting new individuals to cycling. Here I reflect on The Cycle Hub's approach of 'combinatorial innovation', an approach that integrates existing elements in new and alternative ways. I also refer to another process of recruitment through 'cross-fertilisation'. However it is argued that both The Cycle Hub and Tynebikes assumption of a natural transition from leisure based cycling to utility forms of cycling was incorrect. Fundamental differences of cycling infrastructure and the associated meanings consequently inhibited potential cross-fertilisation from leisure to utility cycling. Section three highlights when new individuals engage in cycle politics with different experiences of cycling, they have the opportunity to shape future practices in alternative ways. While members of Tynebikes display a conservative approach to cycling practices, members of Newcastle Cycling Campaign are more likely to push for change. This is further emphasised in Chapter 9.4, which explores a process of maintaining cycling practices through ideas of communities of practice. Tynebikes maintained cycling

performances through the circulation of rules, norms, knowledge and competences, circulated primarily through newsletters. Whilst this maintained existing cycling practices it also alluded to the level of commitment required to perform practices of cycling.

Finally, Chapter 10 refers to the conclusion of the thesis. Split into two sections, the first section of this chapter addresses the three research questions with each question answered using the empirical material and theoretical discussion presented. In regards to the first research question I argue that social sites differentiate their advocacy in various ways that reflect social practice theory's elements of meaning, materials and competences. The combination of these elements also lead to particularised variations of cycling practice. The second research question leads on from this in conceptualising the resulting trajectories of cycling practice social sites contribute toward, referring particularly to how cycling cultures are born, grown, maintained and decline. Whilst the third research question reviews the value and contribution of practice theory as an analytical framework for cycling research. The second section of the chapter moves onto future research where I make three suggestions, positioned within the social practice theory frame. First, I suggest a focus on a 'system of practice' approach in reviewing current practices of planners and engineers. Second, I suggest a broader investigation into how cycling practices integrate with wider everyday life practices. And thirdly, I suggest further investigation into the understanding of cycling 'biographies'.

[This page is intentionally left blank]

2 Theoretical Literature Review – Practice Theory

The Chapter introduces and critically reviews the relevant literature for practice theory and as such outlines and reviews the theoretical framework of the research. Split into three sections, this chapter seeks to both outline and define practice theory before going onto highlight a number of processes in which change can be enacted.

Split into four parts, the first section introduces practice theory with particular reference to Shove et al.'s (2012) three elemental model of material, competence and meanings. In understanding how performances of a practice are constituted by these three element, part two introduces two forms of practice: practice-as-entity and practice-as-performance. It is commented that practice-as-entity provides the framing, resources and pattern for a diversity of practice-as-performances. Part three introduces the notion of 'community of practice', which refers to the characterisation of practice through the mutual engagement, joint enterprise and shared repertoire. The final part refers to systems of practice. Whilst part two highlighted the diversity of performances which can constitute a practice, a system of practice acknowledges a broader socio-technical system in which such practices are configured.

Section two briefly discusses reconceptualising behaviour change. Rather than prioritising human agency as the primary agent for change, this thesis situates change within the shared and social convention of practices. Finally section three builds upon the previous two sections, introducing three mechanisms to outline and contextualise change in practice. Introducing a number of metaphors, this section introduces opportunities to enact change through: the relationships between practices, the life of elements, and the influence of practitioners[1].

---

[1] A 'practitioner' in Social Practice Theory literature refers to an individual who enacts a performance. For instance, in reference to this thesis an individual who cycles would be considered a practitioner of cycling. Whilst 'practitioner' is referred to in this manner throughout Chapter 2, the rest of the thesis uses this terminology sparingly due to the potential misunderstanding.

2.1 Situating the Social as Practice

This section of the chapter introduces the theoretical constructs of practice theory and a number of its key components. Split into four sections, the first section highlights that social life is hung together through practices, which are constituted through a nexus of actions. Referring to routinized behaviour, I popularise Shove et al.'s (2012) three-element model of material, competence, and meaning, which culminate and integrate to form practices. Subsequent performances or 'doing' are enacted by individuals as bodily and mental agents, or more simply, carriers or practitioners of a practice. Section two expands on the description of elements of a practice by defining practice-as-entity and practice-as-performance. Whilst entity may provide a formal and simplified understanding of a practice, performances refers to the multitude and diversity of performances which constitute it. Therefore, whilst these two concepts can be analytically separated, they are fundamentally connected and mutually configuring. I then move onto the notion of community of practice in section three. A community of practice is a reflection of a group of individuals that produce a coherent community through mutual engagement, a joint enterprise and a shared repertoire (Wenger, 1999, pp.72-85). Where communities of practice exist provides sites of interaction between people and particular elements of practices. They thus contribute to the on-going development of the materials, competences and meanings which constitute it. The final part of this chapter section acknowledges a broader socio-technical system in which practices configure within. It is argued that systems of practice enable the widening of possibility and identification of intervention that can create desirable practices. In understanding systems of practice acknowledges and widens investigation into how patterns of practice "are produced and held in place by multiple, and sometimes seemingly unrelated, infrastructures, institutions and policy domains" (Macrorie, Daly and Spurling, 2014, p.17).

2.1.1 Defining Practice Theory

Practice theory acknowledges that people's lives 'hang together' whereby practices are organised nexuses of actions (Schatzki, 2002). For Reckwitz (2002), practice theory cannot reduce the social to any one single element in mental qualities, discourse, or interaction, as it treats practices themselves as the smallest unit of social

analysis. In conceptualising practice theory he refers to the value of 'elements' as "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" (2002, p.249). It is the relations between such elements that has defining importance when considering the diffusion of practices and circulation of elements which contribute to such practices (Shove and Pantzar, 2005).

For Schatzki (2008; 2002) practices relate to a routinised behaviour consisting of several elements all interconnected to one another as "a temporally unfolding and spatially dispersed nexus of doings and sayings" (Schatzki, 2008, p.89). What organises the doings and sayings in which practices emerge include: 'practical' and 'general' understandings, 'rules', and a 'teleoaffective structure'. Practical understandings refer to certain abilities, which relate to the actions of a practice. Most importantly, these include: "knowing how to X, knowing how to identify X-ing, and knowing how to prompt as well as respond to X-ings" (Schatzki, 2002, p.77). Knowing how to X includes both when X is a *basic* action (assumed to be a motor- or perceptual-cognitive skill) and when X is a non-basic action (to know which doings and sayings one is capable of). General understanding refers to a general view of a practice in which a community of practice share and express in their performances and actions (Schatzki, 2002, p.86). Rules constitute principles, precepts, and instructions that instruct, direct, or dispute people into performing specific actions, interjected into social life as a purpose of manoeuvring and governing the course of an activity, generally by those with authority to enforce them (Schatzki, 2002, pp.79-80). Finally, a teleoaffective structure refers to "a range of normativised and hierarchically ordered ends, projects, and tasks, to varying degrees allied with normativised emotions and even moods" (Schatzki, 2002, p.80). Contained within the practice's teleoaffective structures are emotions and moods that are "correct or acceptable for participants' behaviour to express when participating in the practice" (Schatzki, 2008, p.102).

Whilst these definitions culminate in a 'block' so to speak, which relies upon the existence and interconnectedness of such elements, they lack the conceptualisation of a unified theoretical framework in which practices can be succinctly organised and structured. Shove, Pantzar and Watson's 'The Dynamics of Social Practice. Everyday

Life and how it Changes' (2012) theorises practices in a more simplified and succinct model of three key elements: 'materials', 'competence', and 'meanings' (Figure 2-1). Shove and Pantzar (2005, p.45) first draw to attention this three element configuration of social practices when commenting "we work with the notion that practices involve the active integration of material, meanings and forms of competence".

The culmination and integration of these three elements consequently form a practice with all three elements needing to be present in order for a practice to take place. Shove et al. (2012, p.45) usefully comment to visualise three separate layers of a map in which each layer represents materials, competences, and meanings. In order for a practice to be performed, requisite elements must exist within each layer and overlap with one another. This overlapping is critical as elements can co-exist yet not be linked together and thus the performance would not happen. Interestingly then it can be considered that if elements are present but not yet linked together they form a 'proto-practice', whereas practices which disintegrate and no longer exist refer to 'ex-practices' in which links are no longer made between elements (Shove et al., 2012). This reasserts that for practices to exist elements must be connected and renewed consistently to maintain stabilisation and routinisation. Once links are made and performances of such practice exist, it cannot be assumed that this to be an end point of the process of normalisation, but rather it should be considered that practices need to be understood as ongoing accomplishments of elements repeatedly connected together in similar ways (Shove et al., 2012, p.24). It is these three elements that we now turn to and explore further in order to sufficiently define practice theory.
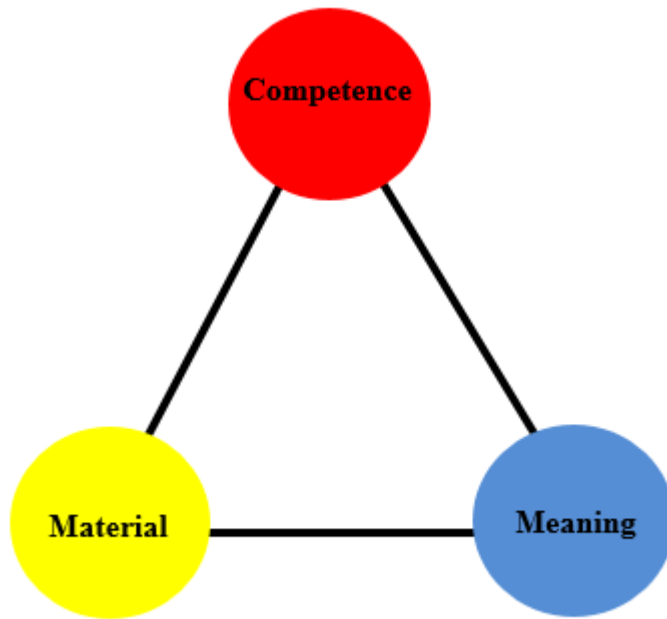
Figure 2-1 Three-element model of practice (Shove et al., 2012, p.28).

Material

Shove et al. (2012) refer to a recent consensus to treat 'things' as an element of practice (See Ropke, 2009). Materiality has remained an under featured element within social thought, with Schatzki observing that the dominant stance in social thought was to consider physicality and nature as "mostly irrelevant to the character and progress of social phenomena, instead forming background conditions against which social affairs proceed" (Schatzki, 2010, p.126). In acknowledging this Schatzki's (2010) *material arrangements* attempts to identify a relationship of being amidst practices (doings and sayings) whilst also being distinguishable to the practice itself. Yet, objects and materials are viewed as necessary components of practices and are just as indispensable as bodily and mental activities (Reckwitz, 2002). Shove et al.'s (2012) conceptualisation of the three elements model assumes these 'things' to be assumed within the practice. Materials refer to how "practices are intrinsically connected to and interwoven with objects" (Reckwitz, 2002, p.106). For Shove and Pantzar (2005, p.45) they use an example of football in which footballers do not simple 'use' or appropriate the ball, rather in the kicking of the ball in the process of playing, the ball is actively involved in *reproducing* the game itself. The multiplicity

of materials is evident with Shove *et al.* (2012, p.23) referring to materials as "objects, infrastructures, tool, hardware and the body itself" whilst Schatzki (2010, p.127) identifies four main type, those being 'humans, artefacts, organisms, and things of nature'. Shove's 'Matters of Practice' (2017, pp.1-2) seeks to bridge this material conundrum in stipulating three *roles* materials can play in practice: 'infrastructure', 'devices', and 'resource' and is resultantly somewhat similar to Shove and Walker's (2014, p.50) boundaries of materials, referring to the availability of infrastructures (grids, pipes, roads), devices (cookers, cars, bicycles), as well as energy sources (gas, electricity, oil).

First, some 'things' are required for the enactment of a practice, but are not engaged with directly, thus these are commented on having an *infrastructural* relation within a practice. These infrastructures maybe in the background (networks of water, power or data) but their value is in enabling devices in the foreground, thus enmeshing in practice and enabling the on-going mobilization of these things in action (Shove, 2017, p.4). The construction of an infrastructure system considers having to cope with 'peaky-ness' in which rhythms and complexes of practices may result at a similar time of other individuals practice regimes, such as the morning commute in the car or the drive home after work. As practices are always on the move, interventions at the level of infrastructural relations have the ability to intervene in many practices at once. With infrastructure needing to be repaired, re-shaped and renewed, they provide moments where material-practice relation and therefore wider practice performances may alter and change (Shove, 2017, p.11).

Secondly, materials maybe mobilized and actively used or manipulated in order to perform practices, therefore acting as *devices*. Easily identifiable through their active use and visibility in the process of the practice, these devices and their user create 'hybrid entities' in which Shove describes cooking being part cook, part appliance. Therefore the practice of cooking is not done by the cook but rather described as being an 'extended' body (2017, p.4). Shove also refers to a conceptualization rooted in actor network theory, in which not only the device, but also the designers of devices 'script' the user. Objects, artefacts and infrastructures can therefore determine boundaries of competence necessary in which to perform a practice. Furthermore, this determination of boundaries may change with the introduction of new innovative

material in which certain aspects and competences may transfer from the human, to being delegated by the technology of the material (Shove et al., 2012). Here then the user maybe locked into a particular action of using the device or at least find it difficult to resist. Innovations may undermine the value of skills and knowledge once held by an individual and become packaged within the new material object. This awareness of the device but also the designer in the process, acknowledges how knowing and doing can become 'black-boxed' within the device itself. As objects fall out of use, the skills and knowledge of how to utilise them begin to disappear too, to a point of becoming a little know secret or seen as performing 'practices of history'. Perceiving devices as mere objects for use in practices is therefore rejected; rather they themselves become implicated in the practice.

Lastly, for practices to be performed, materials in the form of *resources* are necessary in which they are used up and consumed or transformed immeasurably. Baking requires an ingredients list where these ingredients, along with fuel (to power the oven) are consumed when making something such as bread. When consumed, these resources are utilized and reconfigured, not necessarily 'used up' (Shove, 2017).

Defining material in relation to their *role* in a practice begins to develop the material element further in understanding types of interconnection and prefiguration (Shove, 2017). These material objects may take different roles within different practices and therefore these 'things' may alternate between the different categories based on its positioning and relation to various practices. What is consistent however is how these three relations are essentially inseparable, becoming connected and configured consistently in various combinations in relating to the relevant practice in question. Shove further theorises that fundamental questions must be asked regarding what these materials and their related forms of energy are for rather than assuming their fixed nature in underpinning discussions of resource economics and energy demand (2017, p.11). This opens up a multifaceted understanding to material elements where not only 'devices' are of importance but background materials which may go unnoticed or are presumed to be benign, yet fundamentally contribute in perpetuating unsustainable practices. What is also argued is that these distinctions of materials being in the foreground or background often reflect further boundaries referring to institutional roles of management and responsibility (Shove, 2017). As a result, this

begins to go beyond the idea of materials merely being utilized in the performance of a practice and begins to understand how materials themselves have the ability of making and reproducing particular flows of practice and more importantly by *whom*.

More generally, materials may reflect potential inequalities of access to particular practices, therefore limiting particular practices and promoting others (Shove et al, 2012). Materials can therefore be viewed to prefigure practices, in which it provides possible 'paths of action', prefiguring the course of a practice in indefinitely complex ways (Schatzki, 2010, p.140). As a result different material arrangements configure one another "frequently doing so in ways that are of relevance for who has access to what" (Shove et al, 2012, p.47). These material components may be deemed as a 'closed' script in that their role and relation to other objects and artefacts are tightly defined; therefore substituting them for alternative materials becomes very difficult (Shove et al, 2012).

Competence

The second element 'competence' relates to the know-how, understanding and practical 'knowledgeability' in which particular enactments are judged (Shove et al, 2012). The general interpretation of competence being the enactment of knowledge transfer as a simple sending and receiving however is potentially naïve. The idea of knowledge is that it needs to be abstracted from the situation it is in before being reversed when arriving at a new destination. The imagery of knowledge being a reservoir that holds knowledge products in this space of temporary limbo, leads to this idea that knowledge has been "abstracted, de-contextualised but not yet re-embedded knowledge" (Shove et al, 2012, p.49). These reservoirs can be both virtual and actual with memories and resources such as libraries and the Internet providing access to them. However it is argued that this abstraction and reversal is only possible to sites where a person is already prepared through prior, practice-based experience (Shove et al, 2012). Therefore to view knowledge standardisation and sharing as a mere channel in which competency runs through would be too simplistic, as it is itself part of this narrative in understanding the development of the practice (Shove et al, 2012). Forms of competence travels through abstraction and reversal but also through 'cross practice creep'. This leads to the importance of acknowledging that knowledge can be

"modified, reconfigured and adapted as they move from one situation or person to another as they circulate between practices" (Shove et al, 2012, p.52) This however, relies on the ability to decode these, which is itself created through previous practice based experiences (Shove et al, 2012).

Royston, Daly and Foulds (2014) identify two concepts of know-how, the practical knowledge and thus the experiential framework, and know-what, referring to explicit and intellectual knowledge. Whilst know-how is often tacit it does not limit it being shared between people. Collective experiences and shared participation in a practice such as 'showing' or 'doing together' of related to 'communities of practice' enable such sharing. Such learning-by-doing potentially evident in apprenticeships through observations of others provide such mechanisms of spreading 'know-how'. It is argued then that the practice must come first for the circulation of know-what (Royston, Daly and Foulds, 2014). For instance, the use of instruction manuals may not be fully meaningful until a practice (which the manual offers instructions to) is performed (Royston, Daly and Foulds, 2014). When comparing to behavioural theories, the importance of major life events or disruptions in existing practices (such as the closure of a road used for the daily car commute) are identified as moments of opportunity to 'bombard' individuals with information (know-what) in order to change behaviour. These concepts however acknowledge that these moments expose people to new ways of doing, whereby people 'acquire' new 'know-how', thus re-negotiating, reconfiguring or making existing performances more durable and resilient (Royston, Daly and Foulds, 2014). This relationship of know-how/know-what, tacit/explicit, embodied/cognitive is subsequently questioned by Royston, Daly and Foulds, (2014) in having implications for practices in the different knowledge potentially providing change/stasis in practice. It is questioned if know-how constantly evolves experiences, yet know-what is codified, then does know-what maintain a level of consistency in a practice and thus status quo, whilst know-how enables the challenging of this and therefore creating opportunities of innovation in practice.

Lastly, by including the element of 'meaning' into practice it seeks to remove the perception of it standing outside of practice, acting as a motivation or driving force. Instead, "mental activities, emotion and motivational knowledge" (Shove et al, 2012, p.23) are collapsed together to define the symbolic significance in participating with the practice. As it is widely discussed in cycling literature, by participating in cycling the individuals generally locate themselves within society ascribing them within a particular social and cultural hierarchy. By doing this they reaffirm and reproduce these structures of meaning and order (Shove et al, 2012). However, this generally emphasises the individual within society rather than the position of the practice in social order. This is exemplified with much of the cycling literature taking a behavioural studies stance which has an interest in what cycling says about the person and not how particular meanings may circulate between practices or how they may connect or disconnect with other symbolic constructs. This element of meaning then, is sought to be put at the middle of enquiry and to investigate how categories are associated with the practice and "how does this population change and with what consequence for these frames of meaning" (Shove et al, 2012, p.55) rather than discussing who determines the meaning of the practice.

Situating the Individual within Practices

Moving on from Shove et al.'s three element model, the subsequent performance as an action of 'doing' regards the individual who enacts such a practice as a bodily and mental agent, thus acting as a 'carrier' or 'host' of such practice (Reckwitz, 2002, p.250; Shove et al., 2012). Rather than the individual standing at the centre of the investigation as seen in the form of homo economicus (self-interested figure) or homo sociologicus (norm-following and role-playing actor), within practice theory, agents are the body and minds which 'carry' or 'carry-out' social practices (Reckwitz, 2002). Thus practices only exist in the routine nature of action, emphasising that practices only exist in their repeated iteration of enactment. Yet, it should not be assumed that the individual is a mere instrument of movement, which enacts a practice. Rather "we learn to be bodies in a certain way" with the "skilful 'performance' of (human) bodies" necessary to successfully carry practices (Reckwitz, 2002, p.251). Bodily

activities require modes of handling particular objects, intellectual activities of talking, reading or writing, as well as routinized mental and emotional activities. Schatzki (2002, p.72) expands upon this, stipulating that practice is a set of 'bodily doings' and 'sayings'. Whilst bodily doings refer to things people do with their body such as waving, running, pouring, and throwing, sayings refer to the subset of doings as they say something, usually about something. This does not necessarily need language to make sense as shakes of the head; waves of the hand and winks can all mean to say something in a given context (Schatzki, 2002). Moreover, as practices are changing all the time it would be wrong to consider performance as a passive process (Shove et al., 2012). Shove et al., raise two important aspects which emphasises human agency, first that practices are active integrations of elements and whilst they are viewed to 'capture' carriers it is argued that not all humans are faithful and reliable servants (2012, p.126). Secondly, with practices viewed as constituting the social world, there is evidently nothing beyond this. As a result "human agency is loosely but unavoidably contained with a universe of possibilities defined by historically specific complexes of practice" (*ibid*). As a result of this, practices make agency possible, a conclusion which is not too dissimilar to the point that practices do not exist unless enacted by human beings.

Following on from this decentralisation of the individual, it would be wrong to consider that such 'mental' activities of understanding, knowing how and desiring is a quality of the individual. Taylor (1971, p.27) summarises:

> "Meanings and norms implicit in […] practices are not just in the minds
> of the actors but are out there in the practice themselves, practices which
> cannot be conceived as a set of individual actions, but which are
> essentially modes of social relations, or mutual action."

These mental patterns therefore do not exist deep inside the individual, attributable to them but are a part of the practice. An individual through their exposure and participation with the practice acquires the understanding of a practice. Once acquiring this competence, an individual perpetuates the practice, performing actions, which signify this same understanding (Schatzki, 2008). This understanding therefore expands through the manifestation of performances by people and whilst it may be

considered to be partly 'in the practitioner' through their introduction and exposure to such elements, it is because it is 'out there' in the form of persistent behaviours, continuing to perform it (Schatzki, 2008).

Just like mental activities are not distinct to individuals but practices, so too are identities constituted by the practice's understandings, rules, and structure. Shove et al. (2012) argue that cultural practices tend to emphasise the positioning of the individual within social order and not the relative position of the practice. Schatzki clearly distinguishes that "a practice is a set of individuals' actions, but not a set of actions defined by reference to individuals alone" (2008, p.106). Rather than taking an interest to understand what practices such as cycling say about a person then, it is important to conceptualise how meanings associate to the practice and circulate between practices, therefore combining or connecting with, or break away from other symbolic constructs (Shove et al., 2012, p.54).

2.1.2   *Practice-as-Entity and Practice-as-Performance*

A common distinction in practice theory is made between practice-as-entity and practice-as-performance (Schatzki *et al.*, 2001; Shove *et al.,* 2012), the former being the thing, 'block' or 'pattern' (Reckwitz, 2002) we can readily identify as a shared practice (such as riding, cooking, shopping) and the latter being the enactment of the practice, or its actual 'doing'. Spurling and Blue (2014) extend upon the notion of practice-as-entity and practice-as-performance in order to identify how change is enabled through these definitions. In its simplest form, practice-as-entity refers to an 'ideal type' in which the entity considers the combination of all characteristics of a phenomenon without reference to any one particular case (Spurling and Blue, 2014). Schatzki (2008, p.101) clarifies this when commenting:

> "The understandings, rules, and teloeaffective structure that organize a practice specify how actions (including speech acts) ought to be carried out, understood, prompted, and responded to; what specifically and unequivocally should be done or said (when, where …); and which ends should be pursued, which projects, tasks, and actions carried out for that end, and which emotions possessed – when, that is, one is engaged in the practice."

This refers to when a particular practice is spoken about or understood in a mainstream, normal or typical way of doing, thus creating a straightforward and simple correlation between practice-as-entity and its performances by creating a formal structure in identifying what performances are correct or acceptable. Yet as cycling is clearly performed in different ways with a wide variation of cycling performed as well as being performed differently through time and space, thus "the practice of cycling as entity provides the framing, the resources and pattern for a diversity of performances of cycling" (2012, p.490). Thus, when considering entity as all the performance of a practice across time and space, it refers to the multiplicity of the entity in three particular ways.

Firstly, rather than contributing towards a particularised 'ideal type', considering entity as all the performances of a practice at a given moment embraces the diversity of ways of doing. For instance, in the case of cycling, the variety and range of such cycling *is* the practice entity. Shove and Pantzar's (2005) focus upon the growth of Nordic Walking practices sheds light on this, acknowledging varieties of other walking practices such as for transport, walking for fun and incidental walking, which all share enough similarity to be considered as an entity of walking, yet can be viewed a distinctive forms with unique elements of their own. Watson refers to a 'diversification' of practices through the growth of niches of innovation. Examples within cycling include the emergence of fixed gear bikes; wearing 'velo-chic' clothing which resists the wearing of fluorescents clothing or lycra which is commonly associated to cycling; and the use of alternate bicycles such as cargo bikes or box fronted tricycles commonly associated within cycling practices in northern Europe (Watson, 2012, p.495). This, according to Watson leads to the proliferation of manifestation of the practice of cycling, producing multiple points of contact in which new practitioners can be recruited and the wider practice of cycling be increased.

Conversely, entity can be considered by a broader range of performances, for instance, the entity of cycling is not made up solely by cycling performances but involves multiple practices which enables this performance. The performances of engineers, transport planners, car manufactures, policy maker etc. are assumed into a 'reproduction circuit' in which the practice of cycling shapes and is shaped by. This concept is better understood as relating to the 'System of Practice' which is explored

in Chapter 2.1.4 and refers to the widening of possible interventions and investigation beyond the performance of a practice itself.

Finally, practice-as-entity can also be considered as the accruing and development of performance of a practice over both time and space. This contributes further to the variety of elements in which the history of performances affords. Past performances can have obdurate qualities in which the practice as entity maybe constituted with embedded elements that persist through the history of performances. Spurling and Blue (2014, p.6) argue that this obduracy is easily identified in the material world, with structures built in relation to 'ideal types' of practices and perception of what was 'normal' historically which maybe no longer relevant. Whereas Shove (2012) highlights that obduracy, instead of being caused by materiality's alone, also involves social groups in relation to their specific ways of thinking. Whilst again embracing variety, it expands on this through the recognition that past performances are subsequently associated to both performances of the now and in the future, both enabling a constraining particular trajectories of a practice through the 'stickiness or durability of material and social cultures' (Shove, 2012, p.371). Performances of practices over space on the other hand considers the *diffusion* of meanings, competences and materials which circulate between different countries, communities and cultures which then come together in alternative ways (Shove and Pantzar, 2005). Practices cannot be something that can be exported in its entirety as they are situated performances, always in the process of formation, re-formation and de-formation through their enactment (Shove et al., 2012; Shove and Pantzar, 2005). Furthermore, this neglects the understanding of how such a practice is positioned within that particular society in relation to other practices as well as the resulting system of practice and community of practice it is located within, which we explore in due course.

When considering the entity concept as one of these three examples, it moves away from a processual, static and standardised conception in which there is a reproduction of the status quo when considering practice-as-entity as an ideal type and instead embraces spatio-temporal qualities and emphasises the variation and potential transformation of such entity of a practice (Spurling and Blue, 2014). Whilst Figure 2-1 helps to visualise Shove et al.'s three element model of practices and how such

elements connect and interact with one another to constitute a practice, Kuijer's (2014) working paper usefully expands upon this conceptualisation through the introduction of 'bubbles', thus visualising how single performances themselves contribute to and constitute partial manifestation of the entity of practice in question. Figure 2-2 refers to an example of Kuijer's bubble model, highlighting how various performances of a particular practice may share a number of elements yet also include a number of unique elements in respect to their performance.
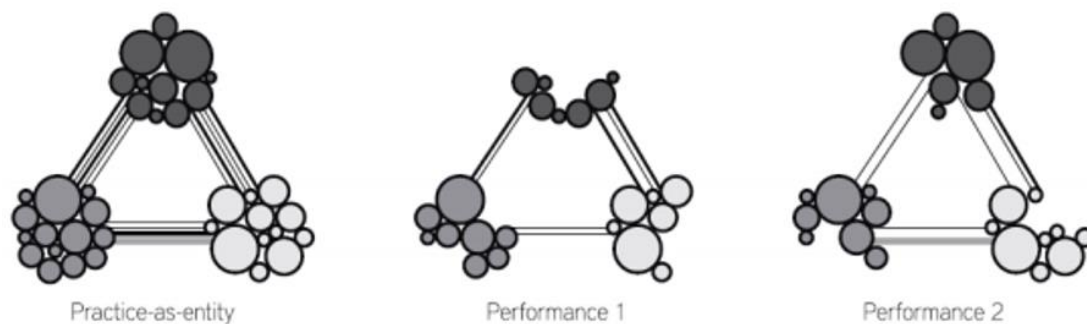
Figure 2-2 Relationship between practice-as-entity and practice-as-performance visualised (Kuijer, 2014, p.43).

Kuijer's (2014) edited visualisation of Shove et al.'s (2012) three element model assists in moving such model away from a static view of a practice in helping to envisage such fluidity and variation. However, whilst the ideal formulation of practice-as-entity maintains a deterministic quality, it none-the-less still enables change but on a lower scale. In considering Giddens (1984) notion of a 'reproduction circuit', we can consider loops of feedback and feedforward in which ongoing 'monitoring' of both entity and performance result in either the continuation or alteration of a practice-as-entity. As a result practices are never static or the same, but are dynamic and constantly being reproduced, therefore enabling opportunities of change to happen at any point. What is consistent then is that whilst these two concepts can be analytically separated, it is critical to consider both practice-as-performance and practice-as-entity fundamentally connected and mutually configuring. "To intervene in performance is to intervene in entity and vice versa" (Spurling and Blue, 2014, p.6).

2.1.3   *Community of Practice*

As previously alluded to, but not yet outlined, Wenger's (1999, pp.72-85) notion 'community of practice' suggests a more tractable characterization of practice, distinguishing it from less tractable terms such as culture, activity, or structure, and defines a special type of community, a 'community of practice' (Wenger, 1999, p.72). This concept has relevance at a number of scales whether that is at the household level, organisational approaches, nationally agreed design and implementation practices or as internationally shared cultural practices (Macrorie, Royston and Daly, 2014, p.28). When defining a community of practice it does not automatically refer to a favorable or romanticized variant of practice. As Wenger (1999) stipulates, communities of practice can give rise to both meaningfulness, but also hold people hostage to that experience. Wenger refers to three dimensions of practice: mutual engagement, joint enterprise, and a shared repertoire, which form the property of a community.

Practice exists because people are engaged in actions with practices existing within communities of people when these are mutually engaged in what they do. This doesn't mean to say that a particular characteristic aggregates a number of individuals into a community automatically; rather it is when dense relations of mutual engagement are organized and sustained around what they do (Wenger, 1999, p.74). Rather than entailing homogeneity, practitioners contribute to a diversity of performances of the practice in which out of the medley results a mutual engagement. Individuals therefore contribute through their competence and knowledge of what they do and know; yet it is also about what they don't do and don't know, with the contributions of others meaningfully connecting (Wenger, 1999, p.76). Mutual relationships in which people connect are therefore more than just similarities and instead contribute to particular personal features or social categories, creating tight interpersonal relationships with one another. This does not assume however that a community of practice is 'a haven of togetherness' where harmony and agreement is consistent as "disagreement, challenges and competition can all be forms of participation" (Wenger, 1999, p.77). This leads Lave and Wenger (1991, p.94) to conclude that just as the individual is not considered at the centre of investigation,

mastery does not reside in the master but that it is the organization of the community of practice which the master is a part of.

The second characteristic of practice as a source of community coherence relates to the development of a joint enterprise. This is the result of the negotiation and complexity of mutual engagement (Wenger, 1999). According to Wenger (1999, p.98) joint enterprise "is not just a stated goal, but creates among participants relations of mutual accountability that become an integral part of the practice". Some aspects of accountability can be reified in the form of 'rules, policies, standards, and goals' (1999, p.81). Yet, just like mutual engagement, a joint enterprise does not mean agreement; rather, within some communities disagreement can be viewed as a productive part of the enterprise (Wenger, 1999, p.79). The enterprise of a community of practice is not just about a statement of purpose as the negotiation of a joint enterprise reveals relations among those involved. Importantly then these relations draw to attention:

> "What matters and what does not, what is important and why it is important, what to do and not to do, what to pay attention to and what to ignore, what to talk about and what to leave unsaid, what to justify and what to take for granted, what to display and what to withhold, when actions and artifacts are good enough and when they need improvement or refinement" (Wenger, 1999, p.81).

Lastly, the final characteristic of practice which contributes to the coherence of community is the shared repertoire of a community which can include "routines, words, tools, ways of doing things, stories, gestures, symbols, genres, actions, or concepts" which the community has produced or utilized throughout its course of existence (Wenger, 1999, p.83). As a space of engagement in action, shared knowledge and negotiation of enterprises, communities of practice provide an opportunity of transformation of social practices alongside other forces already discussed at the institutional level. It enables a deeper understanding into both the transformative and reflexive learning processes in which knowledge, understandings, shared meanings, materials and competences grow and are negotiated (Macrorie, Royston and Daly, 2014).

This mutual engagement of a shared domain of interest, competence and knowledge that distinguishes members from non-members contributes to the construction of relationships and a notion of community (Macrorie, Royston and Daly, 2014). The distinction between 'members' and 'non-members' refers to communities of practice holding particular knowledge, frameworks and stories of understood ways of doing. The distinction of being a member and non-member also draws to attention the notion of a career of practice. Just like the world of work, practices can be viewed as careers in which the individual goes through various stages including, newcomer, novice and fully-fledged member. For Shove et al. (2012, p.70) when starting off as a newcomer or outsider to such a group individuals go through a process in which they engage with and are drawn in by the practice in question. As careers develop, the individual 'see themselves and are seen by others in a different way' to a point where they become a fully-fledged member of the community and in certain cases identify themselves with such practice in that they *become* what they do such as being a 'drug taker' or in relation to this thesis identifying themselves as a 'cyclist' (Shove et al., 2012).

This contributes to social practices, informing the relations between practitioners, performances and practices (Macrorie, Royston and Daly, 2014). Where communities of practice exist provides sites of interaction between people and particular elements of practices, including particular norms, images and rules, contributing to the on-going development of the materials, meanings and competences of a particular practice. These 'spaces' can include both skilled individuals who continue to carry and circulate particular elements as well as new individuals who enrol and equip themselves with such elements through social interaction and knowledge development, thus recruiting new individuals into particularized forms of practice and practice trajectories (Macrorie, Royston and Daly, 2014). Whilst this points towards the maintenance of a particular way of a practice, protecting and enabling the continuation of a practice, such spaces also enable the opportunity of innovation, which can both emerge and develop in such spaces. Methodologically, the concept of community of practice brings into focus the interaction between carriers and their careers without having to resort to methodological individualism (Macrorie, Royston and Daly, 2014, p.29).

2.1.4   System of Practice

A criticism directed at practice theory argues that practices are mere abstract theoretical constructs with little relevance in the real world (Macrorie, Daly and Spurling, 2014). The focus upon single practices performed in particular locations questions the theories of social practice to investigate the change process of practices and conceptualize broader socio-technical systems (e.g. Brand, 2010). As identified by Watson (2012), systems of practice go a long way to nullify this criticism placed on practice theory. In regards to policy Shove (2010a) observes that by re-framing the central issue as one of practice change and not behaviour change, policy would concern itself about how practices develop and not about the individuals' values, beliefs and choices. This acknowledges that the practice involves a wide range of actors, not only the individual and their performance. Producers, providers, and the state itself all develop and circulate elements of which social practices are formulated from (Shove, 2010a).

Processes of change are rarely entirely reliant with the practice concerned, "rather they arise because of the shifting relative location of a practice within broader *systems of practice*" (Watson, 2012, p.491). It is this point in which Watson draws similarities between theories of practice and socio-technical systems transitions. Whilst there have been suggestions that systemic change can be examined between the intersections between practice theory and multi-level perspective (Hargreaves *et al.,* 2013), Macrorie, Daly and Spurling (2014) argue that the use of system of practice alone can sufficiently explain 'socio-technical systemic change' without 'muddying the water' due to systems of practice advocating a flat rather than hierarchical ontology.

Adopting a flat ontological perspective is reflective of features both of "individuals and their activities and of structures of institutions are products, elements, or aspects of practice-arrangement bundles" (Schatzki, 2011, p.14). No structural level of social phenomena exists above practices and arrangements, thus considerations of 'macro' and 'micro' of a multi-level perspective cannot designate distinct levels of society (*ibid*). Schatzki questions the cogency of multi-level perspectives three proposed levels by arguing that what "distinguishes as the micro and the meso "levels" are

really just different components or sectors of a *single* plenum embracing spaces of innovation and spaces that perpetuate the past and present" (Schatzki, 2011, p.16), whilst the 'macro' phenomena simply reflects elements, sectors, or measures of the plenum of practices and arrangements (*ibid*). Thus, in considering some sites or organisations that are clearly situated in systematically advantageous positions in social life, such as governmental institutions, governing over space is only made possible through the "marshalling, coordination and harnessing of countless practices" (Watson, 2017, p.177).

Just as Urry (2004) has defined the 'System of Automobility' (see also Sheller and Urry, 2000) drawing upon multiple elements which produce and maintain the performance of driving a car. Watson articulates that rather than viewing this as one of 'coercion' between the system and humans, it is critical to consider that the approach of systems of practices understands that the emergent, persistence and dominance of the system of automobility is only through the flow of practices which constitute and compromise it (Watson, 2012, 492). Systems therefore persist through routinized actions by individuals throughout the system. The practices that exist "constitute the relations compromising different levels of the multi-level perspective, at 'regime' as well as 'niche' level (Watson, 2012, p.493). Thus, systems of practice enable the widening of possibility and identification of points of intervention that could create positive recruitment to desirable practices, or defection from an undesirable practice. As Watson comments:

> "Practices (and therefore what people do) are partly constituted by the socio-technical systems of which they are a part; and those socio-technical systems are constituted and sustained by the continued performance of the practices which comprise them...Changes in socio-technical systems only happen if the practices which embed those systems in the routines and rhythms of life change; and if those practices change, then so will the socio-technical system" (2012, pp.488-489).

In understanding systems of practice acknowledges and widens investigation into how patterns of practice "are produced and held in place by multiple, and sometimes seemingly unrelated, infrastructures, institutions and policy domains" (Macrorie, Daly

and Spurling, 2014, p.17). Watson (2012, p.491) postulates that practices such as driving rely on a number of wider practices such as those of transport planning and road building to fuel and maintain such practices and as a result utilises the metaphor of practices 'bundling' together, yet I argue here that the concept of practices which 'bundle' together should be reserved to explain and detail something else, which is subsequently covered in Chapter 2.3. What Watson does refer to and identify however is that investigation may not be with the specific practice at hand but understanding the broader dynamics of systems of practice in which people are arguably caught in. Furthermore, Watson draws to attention the value of such systems create 'secondary and feedback effects within the system' which go beyond simple explanation of one specific intervention (Watson, 2012, p.494). This therefore accounts for the system of practice taking on its 'own character of self-organisation and self-extension'.

For Watson (2012) a transition in systems becoming larger and overturning existing and competing systems is not about singular points in time or a singular intervention in itself. As already mentioned practices are dynamic and it should not be viewed as static systems. In his example, he argues that if shifts in a practice such as cycling work in unison and contribute to the increase of cycling, then a transition can start to emerge. Rather than considering this as a smooth transition, it is better to understand change as minor tipping points or a series of thresholds being reached, contributing to a momentum in which cycling can be viewed as normal and as a legitimate mode of transportation thus contributing further to enforcing priorities of road design and formal rules of the road being shifted (Watson, 2012, p.495). Shove (2012) supports this idea of a threshold, but emphasises a further alternate view of disappearance. Either way, the emergence, re-emergence or disappearance are assumed to happen in stages in which thresholds are reached and can signal the emergence/breakdown of a practice as their trajectories develop/decline.

This acknowledges the complexity of systems of practice in which interventions may have unanticipated consequences, generating reactions, interactions and resistance across such practice systems (Macrorie, Daly and Spurling, 2014). With such interventions and the resulting consequences, this leads to a formulation of practice histories, contributing to a dynamic world in which previous initiatives, interventions and knowledge contribute to the perpetuation, evolution or disruption to systems of

practice. Practices therefore evolve across diverse locales drawing in diverse alterations outside the performance of a practice itself, such as the effects of peak oil translating into shifts in recruitment to cycling (Watson, 2012).

2.2   Intervening in Human Activity

Up to now the description of practice theory has been somewhat theoretical and one which defines and conceptualises a performance of practice. However, the theoretical structure since 2010 has begun to conceptualise and theorise its use in the development of behaviour change, most specifically in relation to climate change and the investigation of future sustainable practices. As a result, this section outlines the emphasis on the current paradigm of behaviour, driven by the 'ABC'[2] model of 'attitudes driving behaviour that individuals choose', before arguing that interventions in practices does not require intervention in an individual's choice but rather to understand how certain practices are done, produced, re-produced and prevented.

2.2.1   Reconceptualising Behaviour Change

People carry out a multitude of different social practices in which the individual becomes a unique crossing point of practices. This emphasises the social world being populated by diverse social practices whereby individuals 'consist in' the performance of such practices. Theories of practice therefore approach the relationship between social structure and human action as a recursive one with structure and action co-constitutive of one another (Watson, 2012). Giddens contends that:

> "The 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 social totality, but social practices ordered across space and time" (1984, p.2)

For Shove et al., this theorisation provides an explanation of change that does not prioritise human agency, or conceptualise stability as an outcome of given structures

---

[2] Shove (2010b, p.1274) defines that for the most part, social change is reliant on the ABC model in that: 'values and attitudes (the A), are believed to drive the kinds of behaviour (the B) that individuals choose (the C).'

(2012, p.4). As a result the practice itself becomes the focus of analysis with the over emphasis of individualism reduced and located within or part of social practices (Hargreaves, 2011; Warde, 2005). Shove (2010a, p.1) criticises recent behavioural change tactics, which emphasise individual choice as a space of change, and instead argues this transition and re-centring of investigation onto practices when stipulating:

> "Rather than focusing on individuals – and on views, beliefs and actions as if these were matters of personal choice – recent research analyses and seeks to understand the changing characteristics of the shared social practices these individuals reproduce."

For Shove et al., behavioural-change literature including those of planned behaviour (Ajzen, 1991) emphasise behaviour as a matter of choice in which attitudes and beliefs are particularly important (2012, p.141). Behaviour is therefore very individualistic referred to a matter of personal preference both in terms of action and in relation to change. Shove et al. (2012, pp.143-146) sets out four points of difference that exist between theories of behaviour and theories of practice relating to: basis of action, process of change, positioning of policy, and transferable lessons. First, the basis of action for change in behaviour change situates the individual as the primary agent of change rather than the shared and social convention of practice in theories of practice. Secondly, theories of practice acknowledge an emergent process in which a stream of events unfolds and thus the unit of analysis "may undergo metamorphosis over time and change meaning" (2012, p144). For Geels and Schot variance theory emphasises immediate causation, with it not being "necessary to know the twists and turns of an entity's history to explain it" (Geels and Schot, 2010, p.94). Whilst process theory requires the tracing of events and explanation of this, highlighting broad and structural patterns and trends, thus process theories being 'causally deep' (*ibid*). Third, in relation to the position of policy and intervention, I have already outlined how policy makers are themselves part of the practice system and are therefore not outside looking in or implementing actions which have an effect in isolation, but rather involved with the complex system contributing to the emergence and evolution of such practices. It should therefore be assumed that policy making within theories of practice are not a matter of pursuing pre-defined outcomes but rather it is better to conceptualise it as a:

"More process-based 'succession of short and fairly rapid steps' involving sequences of 'trial-and-error' learning or 'serial adjustment', anchored in and never detached from the details and specifications of the practices in question" (Shove et al., 2012, p.145).

This is heavily contrasted to theories of behaviour change whereby policy makers and policies themselves are viewed as intervening from the outside using various instruments relating to 'carrots, sticks and sermons' in the attempt to remove barriers and provide the opportunities in which individuals make the 'better' choice themselves. And finally, theories of behaviour emphasise the learning from efforts to change behaviour in other countries and other spaces of daily life, referring to the idea that behaviours are outcomes of identifiable factors and therefore it is "possible to identify, quantify and evaluate the merits of behaviour change techniques" (Shove et al., 2012, p.145). Theories of practice on the other hand refer to the historical and culturally specific trajectories of what individuals do and thus reflect such practices and its relations to others.

Questions arise as to why policy has not been reframed from behaviour change to practice change as of yet. To suggest integration between the two would be naïve due to the contrasting nature of the paradigms and therefore the difficulty even impossibility of a merger (Shove, 2010a). Observing institutional organisations such as the Department for Environment, Food and Rural Affairs and the United Nations Environment Programme, Shove (2010b) draws to attention the current importance of defining evidence as information that can translate policy goals into something that is manageable and achievable. A potential reason as to why practice theory hasn't been adopted by many is that there potentially remains a barrier of the usefulness of practice theory within policy and practice. The difficulty of aligning social practice outcomes with the ABC model is that this ABC model is self-perpetuating, in that the results of this enquiry generate the concrete and manageable data, thus creating a self-fulfilling cycle of credibility (Latour & Woolgar, 1986) which then limits the ability of grounded analysis of relevant social practices to be explored. Shove et al. comment that the chances of capturing recruits within the policy world remain difficult due to the ABC model not only being a theoretical position but also a political one (Shove et al., 2012, p.164). This locates both the problem and response as a matter of individual

behaviour and with this, the government's task is in essence to encourage citizens to adopt pro-environmental behaviours and down play the extent to which institutional structures sustain unsustainable conventions and ways of life (*ibid*). Thus, for a practice-theoretical approach to be utilised, for Shove et al., the position of policy needs to be highlighted and exploited rather than obscuring these roles.

This implicates policy as being integral to the system and patterns of practice and not just an external influencing factor. In understanding transitions and changes of practices Shove et al. (2012, p.144) point out the tendency to assume cause-and-effect explanation between policy intervention and behaviour change. This would indicate a process relating to theories of variance whereby the outcome is a result of the independent variable acting upon the dependent variable. However, Shove et al. stress that the process of policy change and pick up isn't necessarily as simplistic. Fundamentally theories of process may demonstrate a better understanding in which outcomes are traced by the 'stream of events through which a process unfolds'. This refuses that the world is constituted of fixed entities, maintaining unitary identity through time and instead establishes a more emergent concept of process that allows transformation over time and change. This emergent process or transition of change occurs through pluralistic networks involving 'government, the market and civil society' (Shove et al., 2012, p.161). Policy interventions therefore do not exist outside of the system, driving long-term change in a particular direction through carrot, stick or sermon methods but are instead apart of the reflexive process in which they rely on non-state actors in the uptake and implementation of the public policy. Policy exists within and a part of the system, intervening on the basis of what has emerged from previous interventions, becoming a part of the process of feedback and emergence with the capacity to actively configure and shape the landscapes in which practices do and do not take hold (Watson, 2012; Shove and Walker, 2010). This therefore diverts away from intervening in 'choices' as provided by personal travel planning for example and instead towards the reflection as to why certain practices are done, produced, re-produced as well as how and why others are prevented (Morris et al., 2012).

2.3   Capturing Trajectories of Practices

Practices endure and remain in existence as long as people keep them alive through recurrent performance. It is through this recurrent performance that the contours of practices are formed and transformed (Pantzar and Shove, 2010). Shove et al.'s book, *The Dynamics of Social Practice* acknowledges a prior assumption that theories of practice had yet to tap into the potential of understanding change and thus capturing the dynamisms of social practices (2012, p.1). Watson (2012, pp.490-491) dispels criticism that theories of practice only focus on the reproduction and repetition of practices through the introduction of three mechanisms in which a change in a practice can happen (practice to practice interaction; change in the element structure; and the influence of practitioners). Whilst I have already explored the theoretical constructs of practice theory, I utilise these three mechanisms to show how such a framework can help to outline and contextualise change in practice. Much research to date has concerned the analysis of complex challenges such as climate change in order to address and respond to unsustainable practices in the attempt of social change. I introduce a number of metaphors which has previously been used in such research to assist in the conceptualisation of this research in understanding how practices are born, grown, maintained and potentially decline.

2.3.1   Relationships between Practices

Practices can feed off one another in a positive *cooperative* relationship. Here, practices are positively correlated in which at least one practice benefits another. Pantzar and Shove (2010) refer to key sites and societal rhythm being home to or host forms of inter-practice collaboration. Practices are therefore not performed in isolation but relate to one another in how people perform them in relation to the organisation of their day (Watson, 2012). For instance, in the morning breakfast provides an arrangement of numerous independent practices, whilst driving home from work correlates with a peak in telephone calls (Pantzar and Shove, 2010, p.24). Whilst the example of driving and calling loved ones may refer to a cooperative relationship, Pantzar and Shove also draw to attention that such practices are also performed separately, therefore refer to dynamics of such relationships, such as

'epiphytic cooperation' (asymmetric cooperation) whereby, driving could increase the likelihood of using a mobile phone but not vice versa (2010, p.24).

Bundles of practices refer to the co-existence of practices that are interrelated as a result of being co-located within a particular aspect of time and/or space, yet have separate existences. Some bundles of practices relate to the physical location of material elements, for instance, practices which require the supply of running water converge around taps and drains (Shove et al., 2012). But this is not limited just to materiality with other elements having the ability to work in the same way, such as concept of privacy informing potential where a number of practices are likely to be reproduced. For Watson (2012), understanding these bundles within a practice approach enables opportunities of change to be identified outside of the practice in hand. As a result of this, it can be considered that the alteration of one practice can have consequences for other practices too. An example of this is to understand how practices of working, socialising and shopping engender the need for particular modes of mobility and therefore interventions in such practices can have resulting impacts upon such mobility needed to complete practices (Watson, 2012, pp.493-494). Termed as 'radical innovation' in everyday life, emerging 'dominant practices' can re-configure entire socio-temporal landscapes through the cooperative relationships they are involved in, creating as a result new rhythmic patterns (Pantzar and Shove, 2010).

Practices may also be connected or united to other practices through the *elements they have in common*. For instance, the smart phone bridges "entertainment (games, watching TV/DVD); socialising (Skype, email, Facebook); household management (online banking); learning and working" (Shove et al., 2012, p.88). Images and meanings of modernity and youth may draw together 'drinking, driving and wearing jeans'. When elements figure in several practices they constitute a common ground and point of connection, acting as zones of overlap and intersection between practices (Shove et al., 2012). This can act as a connective tissue that holds complex social arrangements in place, whilst also having the opportunity to disrupt and pull them apart (Shove et al., 2012, p.36). This refers to the 'sticky' or 'fragile' relationships in the persistence or dynamic character of societal rhythms of practices (Pantzar and Shove, 2010, p.26).

Whereas practices may bundle together to form *complexes* that structure the majority of an individual's daily-with the connection to other practices through "sinews of common and orchestrated organizations and timespaces, shared activities, chains of action, and intentionality" (Schatzki, 2015, p.7). Practice complexes denote practice constellations which are either hard or impossible to separate from one another (Pantzar and Shove, 2010) due to their dependence upon each other, through ways of sequence, synchronization, proximity or necessary co-existence (Shove et al., 2012, p.87). An example of 'driving' as a co-dependent form of a practice complex is used to show how it once involved multi-tasking of individual practices such as steering, navigating and braking. Today however it is considered as a single practice in its own right whereby the learning process involves the novice becoming 'drivers'. In considering that practices are co-dependent on one another, Pantzar and Shove (2010) argue that a change in one practice may provide opportunities of chain-reactions through such practice complexes. Thus an intervention in one practice provides feedback cycles in which one item in the chain catalyses another (2010, p.26). Practices are in themselves circuits of reproduction. As elements constitute a practice, these elements are as a result reproduced through the performance of it, resultantly producing a circuit of reproduction of that practice and therefore providing a mutually constitutive relation between the practice and elements (Pantzar and Shove, 2010). Yet as Pantzar and Shove illustrate, practices themselves form bundles or complexes which are "defined and held in place by a second 'circuit' or reproduction, namely that which characterises the mutually constitutive relations (for instance of competition, cooperation or more elaborate forms) between practices and complexes of practices" (2010, 27).

This draws to attention the potential *competition* between practices. On a basic level, it can be conceived that practices compete for time, yet as cooperative practices show, time maybe shared through a variety of practices which are carried and performed cooperatively. Practices may also vie and compete for space in which space is used in different ways and therefore become defined by what goes on within it (Shove et al., 2012). For instance, in urban areas, children played in streets that have, in time, been displaced by driving practices. In some circumstances streets are still sites of transport and leisure, thus referring to how practices define what space is when used in different ways.

This competition can be expanded to include the elements of such practices, such as material, skills and meanings. In its simplest form, mobility practices of cycling and driving share common elements such as road infrastructure and can therefore prove to be sites of competition (Shove, 2012). Watson (2012) also draws to awareness competition between systems of practices too. He argues that the over emphasis and focus upon the recruitment of people to a practice risks sidelining the understanding the potential *defection* from one practice to another. As Shove (2012) alludes to, any systemic transition to a more sustainable method of mobility will almost certainly necessitate the downfall or considerable alteration of contemporary sociotechnical regimes. In the case of cycling, recruitment to such practice must have in some manner result in defection from other practices such as driving. As a result of this interaction between such systems of practice and the potential of growing defection, this would have a compound effect on competing performances such as driving by the increase of such cycling performances.

Yet the emergence of one practice doesn't necessarily result or coincide with the disappearance of another as a consequence of competition. Shove (2012, p.364) prompts further discussions of the relation between co-existing socio-technical trajectories are necessary in order to define and understand how and to what extent elements of past configurations *persist*. Systems may break down yet still co-exist with new regimes of practice which subsequently *dominate*. Therefore partial remains of once dominant practices but have since been 'eclipsed, bypassed or radically reconfigured' may still remain and it is this understanding of co-existence and persistence that is of interest. As already outlined previously, the obduracy of material and social cultures which survive after such decline of a practice to a point of being somewhat redundant refer to previous practices and ways of doing. For Shove (2012), the process of *revival or reintroduction* of a practice is not the same as the emergence or innovation of a new one first time round. As a result of remnants or the existence of a marginalised practice already exist in the forms of elements and therefore the challenge is more about rescuing, remembering and adapting such elements but not generating from scratch. What is critical for Shove is that in such cases "relevant cohorts of lead users might turn out to be those who are least experimental in orientation, and who are in fact laggards doggedly clinging to old ways" (2012, p.373). Shove et al. echo this point in which novices and new generations at the

45

periphery "have greater scope and motivation for doing things differently and that old-hands, who define the core, are typically stuck in their ways" (2012, p.71).

2.3.2   The Life of Elements

The most obvious way a practice can change according Watson (2012) is through the *elements* themselves, due to their nature of accomplishing a practice. In its simplest form then, practices change when new elements are introduced or when existing elements are combined in new ways (Shove et al., 2012, p.120). This is typified by Shove et al. who argue that policymakers and visionaries should 'hunt down' those elements which have the most negative impact upon carbon emitting practice and design new elements that would that would support lower emitting practices (2012, p.147). The basic assumption here then is the alteration of bad elements which enable the production of bad practices. Both materials, competence and meanings can be introduced and integrated into existing performances of practices with implications to other elements within the practice. An example Watson provides is that "for technological changes to affect a practice, they have to be integrated into performances of that practice by a practitioner, with implications for the competencies and meanings that circulate within the practice" (2012, p.490). This is not stipulate a cause-and-effect relationship however, as it is established that it is difficult to identify the single location of change within a practice due to co-evolution of elements in which an innovation in one element reconfigures the relationship between other elements such that further spaces open up for innovation elsewhere (Watson, 2012). This concurs with Shove and Pantzar's (2005) argument that the emergence and demise of practices involve the forging and failing links between elements of meanings, competences, and materials.

Shove et al.'s (2012, pp.149-151) example of the 'Cool Biz' programme, a Japanese government intervention to attempt to reduce CO_2 emissions involved attempting to change office clothing practices which relied on air-conditioning in the routine enactment of office life. The Ministry of Environment's marketing technique of transforming the meaning of smart and appropriate wear involved high ranking government officials wearing loose-fitted short sleeve outfits in formal settings, whilst the Mistry of Environment organised a fashion show in which ambassadors of Asian

countries walked down the catwalk in climatically appropriate wear. With successful business leaders involved, the clothing industry promoted specially designed garments (materials) under the Cool Biz name. Therefore, whilst the government initially focused on the meaning of clothing in reducing the demand on energy intensive systems and the need for air-conditioning, we can see that new materials were created in the form of specially designed garments, creating a *co-evolutionary* change in elements of a practice. What was perceived as 'normal' was thus recalibrated in which a new pattern emerged as a result. Whilst some individuals felt this change disturbing and a threating process which required them to abandon habits of a lifetime, others found it a relief in bringing institutional expectation in line with their own casual approach (Shove et al., 2012, p.158).

As already drawn to attention practices cannot simply be imported/exported from one space to another. It is not a case of importing the idea/practice, adapting it to suit local conditions. As commented previously in the 'Practice-as-Entity and Practice-as-Performance' section, national distinctions of practices "are significant for and are to some extent made by producers, retailers and importers" (Shove and Pantzar, 2005, p.60). For Shove and Pantzar, their conceptualisation of Nordic Walking's *reinvention* in a variety of different countries provides a better understanding than to assume a process of *diffusion*. Rather than practices spreading to other countries, it should be assumed that *new variants* of Nordic Walking emerge in new contexts and are therefore different practices. Such practices consist of new configurations of existing elements or new elements in combination with elements that pre-exist in such places (Shove and Pantzar, 2005, p.61). Whilst having a number of elements in common in relation to performing such a practice, they are none the less perceived to be a transnational diffusion of Nordic Walking as a *concept* rather than as a practice.

Whilst these draw to attention an intentional intervention of a practice through the introduction of new elements or considerable innovation of elements, changes in a practice may also be continuous and unnoticed until zooming out to chart such change over its history. For instance, showering has altered and evolved over the last century through minor multiple adjustments made in private referring to plumbing technologies and products as well as the timing of the experience, the force of the flow and the value of freshness. This therefore has circulated different and new

materials, meanings and competences which has contributed to a significant evolution of such practice (Shove et al., 2012 p.73). Again, drawing to attention Kuijer's (2014, p.44) working paper, her visualisation (Figure 2-3) of such a process as outlined in Shove et al. helps to picture how such a process of introducing new elements and breaking such links happens.

familiar element

unfamiliar element
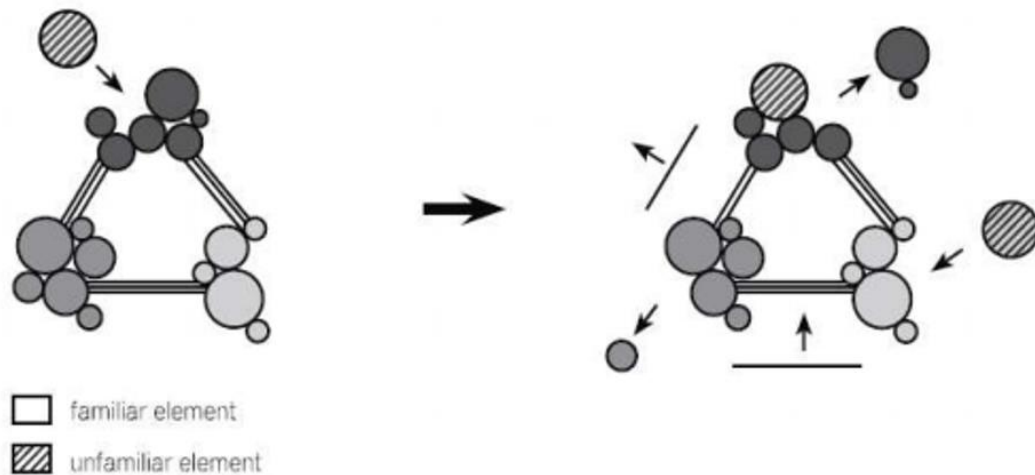
Figure 2-3 Reconfiguration of practice through the introduction of new elements (Kuijer, 2014, p.44).

Whilst this draws to attention the introduction of new elements or creating new combinations of existing elements, it is also important to consider how elements fall out of use through *social-fossilisation* (Shove and Pantzar, 2006). For innovations in practice to succeed they must secure resources and committed followers which often refers to a process of re-alignment and displacement. Thus whilst making new links within such practices it also refers to a process of *breaking* existing combinations of elements in which materials, competences, and/or meanings that once contributed to a practice fall out of use, thus becoming stranded and separated. Shove and Pantzar's investigation of the growth of Nordic Walking identifies how particular organisations facilitated the widespread acceptance and recruitment to such practice through *breaking* links associated to the practice which it was for the fanatical athlete and that the use of walking sticks was associated to frailty, whilst *introducing new elements* associated to injury prevention, well-being and improving the fitness of ordinary people (2005, p.50). This reflects a process of de-classification and re-classification in which old connotations were shaken off and new ones made (Shove et al., 2012). The introduction of the new meanings extends the meaning to encompass such practice.

But, such introduction of new meanings also means the contraction of others. The example of 'freshness' being introduced into laundering and bathing resulted in previous dominant themes of cleanliness or hygiene being overlain, transformed or displaced as a result of the interaction with the meaning of 'freshness', to a point where this notion legitimises and can demand more of the practice in longer or more frequent performances (Shove et al., 2012, p.55). Yet as Shove and Pantzar (2005) allude to, the introduction to new elements are not automatically accepted. Whilst the meaning of Nordic Walking was actively marketed as an 'ordinary activity for ordinary people' it received criticism, looking like another pointless craze. Yet the promotion of walking groups enabled the performance of the practice without individuals feeling silly with groups becoming smaller once individuals felt they could walk alone without feeling silly. Endorsement by the medical profession further normalised the practice to a point in which the practice existed as an entity and therefore as a recognizable practice in its own right (2005, p.53). Whilst this assumes that elements can travel fast and immediately, there must be some caution to this. For materials, this generally happens in their physical relocation and therefore relies of infrastructures and systems in which to transport such objects. Whilst elements involving competence and know-how can only 'travel' if there is a basis in which to build off of existing competences. This depends on local capacities "to embed, reverse' and interpret" and therefore the importance of practices past become a significant point in understanding the capacity in which to de-code, understand and facilitate new competences or meanings (Shove et al., 2012, p.57).

Shove and Pantzar (2006, p.1) comment that such elements 'only have meaning and effect (they only live) when integrated into practice', in that once elements fall out of use in the 'doing' of such practice, they are no longer 'animated, sustained, and reproduced' and at such point fossilisation sets in. Once disconnected, artefacts, images, ideas and skills don't necessarily disappear but remain dormant. Materials once used in motoring for driving involved 'bundling up', in which drivers wore special clothing (coats, goggles and gloves) (Shove et al., 2012, p.34). These objects became part of other practices (driving gloves becoming just gloves), others were discarded (goggles) and ended up in museums, sold or reclassified as rubbish, whilst skills and ideas might be stored in the form of instruction manuals no longer utilised. What this does refer to is that whilst we live alongside traces of elements of the past

there is the possibility of such elements being resurrected and being reconfigured into new combinations of such practice in the future. Yet Shove et al., are somewhat sceptical of this, classifying such opportunities of not necessarily seeing them as being reconfigured but rather 'doing history'. Utilising driving as an example they argue it is "usefully conceptualised as an ongoing, irreversible process of collective forgetting: forgetting how to manage oil and grease; forgetting the full language of hand-signals… and, with satellite navigation, forgetting how to read a map" (2012, p.34). Fossilisation can be both situated as well as systemic, whilst an element can become fossilised in one persons performance, it can remain an indispensable part of another person's way of life. Such fossilisation can be accelerated when changing cohorts of carriers which sustains such practice fails and the flow of recruits, for instance from parents to children falters, with the requisite elements and potentially wider impact of the practice itself becoming endangered (Shove and Pantzar, 2006).

2.3.3   The Influence of Practitioners

People who perform practice can also change; therefore the population of carriers provides a mechanism of change. Whilst practice theory decentralises the individual from analysis, human individuals are nevertheless necessary in order to recognise their "unique capacities and active involvement in the dynamics of practice" (Watson, 2012, p491). Therefore the success of a practice is reliant upon practices *recruiting* individuals who are able and willing to perform them and to hold onto them, preventing them from possible *defection* to other practices. Indeed for practices to survive more than a generation, they need to recruit fresh cohorts of carriers to replace those who either defect or die. For certain practices this recruitment is perceived to be easier or more simply put, expected. For instance, cities are fundamentally planned around the movement of cars and therefore moving around in any other way is generally more difficult. Therefore it is generally assumed that once of an adult age people are expected to learn to drive in order to get around. In some extremes it is considered that "people are required to adopt or refrain from certain practices by law" (Shove et al., 2012, p.69). What is critical here then is that for some practices, where participation may be more voluntary, such first encounters are critical in both recruiting but also retaining 'faithful cohorts' of committed carriers are critical for the practices persistence and maintenance (Shove et al., 2012, p.69).

Referring back to the concept of communities of practice, such social network is viewed to provide a mechanism in which practices circulate and are picked up by individuals. Shove and Pantzar's study on Nordic Walking provides such an example in which it spread between individuals with similar common interests. Furthermore, Shove et al. (2012, p.68) acknowledge that individuals engage in multiple practices and therefore belong to multiple communities at any one time. Thus, social networks overlap and generate what seem to be chance encounters and unpredictable experiences but yet, are situated within and result from the practices that they carry. As practices are not considered as static but rather dynamic in being remade and changed, if only fractionally through the performances of its cohort population, this also draws to attention those who have the opportunity to shape the future of a practice but also those who are subsequently shaped by the experience (Shove et al, 2012).

Although Watson identifies three mechanisms in which change of practice can happen (practice to practice interaction; change in the element structure; and the influence of practitioners), the difficulty of establishing and identifying the location of change within these can be difficult. This is particularly evident between the mechanisms of elements and carriers due to their interdependencies with one another. As Watson (2012, p.490) states for technological change to affect practice, it is to be integrated by a 'practitioner', which emphasises that the carriers themselves maintain the life of the practice through their performance. Therefore this relationship between elements and carriers, policy and practice, is an important and dynamic relationship.

2.4   Conclusion

The first part of the chapter focused on outlining the key components of practice theory with regard to understanding how cycling social sites contribute to cycling practices and forms of cycling culture. Practices relate to a routinised behaviour consisting of several elements all interconnected to one another as "a temporally unfolding and spatially dispersed nexus of doings and sayings" (Schatzki, 2008, p.89). Shove et al.'s (2012) simplified and succinct model of three key elements: 'materials', 'competence', and 'meanings' provides a valuable framework in which this research can utilise. Further understandings of practice-as-entity and practice-as-performance

highlights how various performances of a particular practice such as cycling may share a number of elements yet also include a number of unique elements in respect to their performance. This therefore contributes to the understanding of social sites contributing to particularised cycling practices at an entity level. The role of community of practice introduces an understanding of practices being shared as cultural practices across various scales. In particular reference to Wenger's (1999) mutual engagement, joint enterprise and shared repertoire, communities of practice contribute to performances and practices by providing sites of interaction between people and particular elements of practices, including particular norms, images and rules. This concept therefore contributes to the on-going development of the materials, meanings and competences of a particular practice. Finally, the first section concluded with reference to systems of practices. Here, practices are placed in wider context of a broader system of practices which contribute to the enabling and structuring of a given performance. What this identifies then is that investigation may not be with the specific practice at hand but understanding the broader dynamics of systems of practice in which people are arguably caught in may provide opportunities to enact change.

Whilst the first part of the chapter sought to outline key concepts in order to critically define and outline practices, the second part sought to explore a growing awareness and theorisation of practice theories capturing the dynamism of social practices. Watson (2012, pp.490-491) dispelled criticism that theories of practice only focus on the reproduction and repetition of practices through the introduction of three mechanisms in which a change in a practice can happen (practice to practice interaction; change in the element structure; and the influence of practitioners). Relationships between practices can have both positive and negative consequences. Practices may feed off of one another in a cooperative relationship whilst others maybe in competition. Practices may have elements in common and therefore provide a connective tissue between the two. Practices may also bundle together to form broader complexes of practices whilst others may steal people through the process of defection. The life of elements referred to the alteration of practices through the introduction of new elements or when existing elements were combined in new ways. It was also raised that changes to elements maybe continuous and less noticeable and therefore reviewing practices over time may enable to see such change over the

practices history. Whilst elements can be introduced and configured within performance, elements can consequently fall out of use, leading to a process of social-fossilisation. Finally, people who perform a practice can change; therefore the population of carriers provides a mechanism of change. Practices are reliant on recruiting individuals who are willing to perform and hold onto them preventing potential defection to other competing practices. Going forward then in regards to this research, these metaphors will assist in the conceptualisation of how practices are born, grown, maintained and potentially decline.

[This page is intentionally left blank]

3   Literature Review – Cycling Performances and Practices

This chapter explores the performances and practices associated to cycling. The first part of the chapter focuses on cycling as a performance. This part of the chapter seeks to convey that cycling isn't a uniformed and homogenous practice, but rather a diverse and contested practice formed of various performances, both similar but also diametrically opposed or in conflict. This part of the chapter will show cycling can be performed in different ways according to the knowledge and understanding of cycling, material arrangements present and meaning attributed to such practice. It is raised here that whilst the thesis primarily focuses on transport cycling, other performances of cycling are explored with an interest shared elements and opportunities of intersection between performances of cycling. Within this section, it is raised that understandings of fear and stigma are present in particular performances of cycling with this investigated further in understanding how such performances are understood in regards to social practice theory's meanings, materials and competences (Shove et al., 2012).

The second part of the chapter briefly summarises transport planning and policy practices, moving beyond the practice of cycling itself and instead considering broader practices associated to cycling. This draws upon social practice theory's 'system of practice' in order to understand producers, providers, and the state itself all develop and circulate elements of which social practices are formulated from (Shove, 2010a). It is outlined that the system of automobility remains a dominant and obdurate system in which the practice of cycling remains marginalised and outmoded. This section of the chapter discusses this competition between cycling and driving within a wider socio-technical system before discussing hard and soft interventions associated in the aim of growing the cycling practice population.

The final part of the chapter considers the relationship between cycling practices and advocacy and activism of local cycling culture. In regards to social practice theory, it is useful to consider 'communities of practice' throughout this section in how cycling advocates and activists can give rise to both meaningfulness, but also potentially holding people hostage to a particularised way or experience of cycling (Wenger, 1999). The first section of the chapter discusses the role of cycling campaigns,

highlighting particular methods of advocacy and activism, whilst the second section builds upon this in understanding how such groups and communities advocate for particular performances of cycling particularly in regards to the vehicular cyclist and separated cycle infrastructure. The third and final section refers to a number of spaces *of* cycling, which highlight physical spaces of the cycle workshop, cycle hub, and bike cafes that all contribute to and popularise particular understandings and performances of cycling.

3.1   Performances of Cycling

Horton et al's. (2007) Introduction to their book *Cycling and Society* acknowledges that cycling has a plurality of meanings; it is many things in both different spaces and over different courses of time. As such, it can be conceptualised that cycling is not a unified and singular practice but a series of cultural practices (Cox, 2015, p.4). Considering this diversity of cycling or 'cyclings' as Cox terms it, the variety of activities and behaviours suggests that whilst a marginalised and minor method of transport in British context, it is formed of a vast network of understandings, signs, materials, and knowledge.

Research has attempted to conceptualize distinct categories of cyclists, identifying a number of identities. In relation to British contexts, Pooley et al. (2013, pp.44-45) suggest that people who cycle can generally be classified into one of three cycling identities: 'leisure cyclist, utility cyclist or primary cyclist'. Referring to meanings of enjoyment, pleasure, and exercise, performances of leisure cycling are primarily conducted off-road or on quiet lanes (Pooley et al., 2013, Gatersleben and Haddad, 2010). Such cycling does not provide any connection to trips of utility but rather the use of the car would be needed to transport the bike to areas of beauty in order to maximize enjoyment of trips.

The utility cyclist on the other hand predominantly uses the bicycle for small trips within their daily life such as cycling to work, to school or to the shops. Whilst similar to the leisure cyclist in that they may enjoy this, the primary reason for doing so is due to the bicycle being the most convenient, accessible, efficient and cheapest mode of transportation (Pooley et al., 2013). A utility cyclist may seek forms of separation at junctions or on busy roads, whereby designs need to take into account

the safety of the individual. The connection and identity of being a 'cyclist' doesn't particularly hold strong for utility cyclists (Pooley et al., 2013).

Finally, an individual defined as a primary cyclist identifies cycling as their main mode of transport and are most likely not to own a car, or if they do, they don't use it often (Pooley et al., 2013). Both their life and family members are organised around the use of the bicycle and these individuals generally form the core membership of cycling advocacy groups (*ibid*). A primary cyclist is a confident individual undeterred of the road situation and will reject longer but quieter routes (Dill and McNeil, 2012). As a result they are more resilient to negative aspects with strong social beliefs, associating themselves as 'cyclists' and are more likely to respond positively to cycle campaigns (Dill and McNeil, 2012; Davies et al., 1997).

Yet, whilst these provide three seemingly well-contained performances, it is argued here that cycling cannot be easily defined. A blurring exists in which elements of one performance is evident and acceptable in other performances of cycling. For instance, leisure cycling is perceived to be specialised through the use of equipment, with people wearing lycra, helmets, 'high- visibility' clothing and mirrors (Gatersleben and Haddad, 2010), yet performances of utility and primary cycling also include the wearing of such cycling accessories for similar perceptions of safety. In the context of leisure cycling the environment and infrastructure is of importance to these individuals with cycle tracks and lanes ensuring safety to ride two abreast in the case of parent and child (DfT, 2008). Similarly, in regards to utility cycling the road network is considered dangerous and as a result individuals would sacrifice directness (both distance and time) for a route that has less traffic, slower traffic, quieter streets and more places to stop and rest (Dill and McNeil, 2012; DfT, 2008). Both utility and primary cycling refer to the use of the bicycle for work, shopping and social travel means, whilst leisure cycling in the form of the 'sports cyclist' and primary cycling in regards to the association to cycling groups and environmental associations can often be negatively stigmatized as 'cyclists'.

Just as performances of cycling are not homogenous, it is also not performed equally within a British context. With a growing focus on cycling equity highlighting its inequality, not all communities or groups benefit from the transportation mode. Such

work has focused on gender, age, privilege, ethnicity, and disability (Andrews et al., 2018; Goodman and Aldred, 2018; Aldred and Dales, 2017; Flanagan et al., 2016). Cycling is particularly gendered. Skinner and Rosen (2007) define men generally displaying a hands-on, comfortable relationship to technology, setting up their own lighting and load-carrying systems and handling repairs whilst women regularly commented on having repairs sorted by a man be it their husband, son or professional cycle repairer (who are predominantly male) (Skinner and Rosen, 2007, pp.89-90).

Where cycling is low, it is also demographically skewed, with women, children and older people tending to be under represented (Aldred et al., 2016). Whilst this can be argued or assumed to be a natural phenomenon, Pucher and Buehler (2008) identify that women cycle a higher proportion of journeys to men in cities with higher cycle rates, along with cycling remaining a major mode of mobility in older age. When commuting cycling levels do increase (in reference to England and Wales), it is evident that there is no statistically significant improvement in the gender equality, along with age equity declining (Aldred et al., 2016). In reference to age equity, Aldred et al., state that this potentially relates to a time lag in the uptake of cycling due to 'early adopters' tending to be younger.

In reference to cycling infrastructure, women as well as those over 60 and under 18's are more likely to ride on protected lanes than on parallel roads. Whilst women and older people are more likely than men or younger individuals to wear clothing associated to safety such as high-visibility clothing (Aldred and Dales, 2017). It is advised that the provision of high-quality infrastructure should be an important part of a co-ordinated strategy to alter gender and age imbalances (Aldred and Dales, 2017, p.361; Aldred et al., 2016). Aldred et al. (2016, p.40) identify a potential differential threshold effect; in that particular demographics, most notably, women and older people, would require a more supportive cycling environment than for men and younger individuals.

Within the UK, non-white people are around half as likely as white people to cycle (Goodman and Aldred, 2018). Goodman and Aldred argue that where cycling and ethnicity is discussed it is usually in regards to cycling as culturally alien to non-white Britons and as a status threat for marginalised groups. Yet such focus on minority

culture may neglect other potentially important issues, including the locations where public and private organisations provide cycling infrastructure (Goodman and Aldred, 2018). In Portland and Chicago, USA, research identified a bias towards increased cycling infrastructure investment in areas of existing or increasing privilege (Flanagan et al., 2016). Low-income areas (income and house value) are comparatively less likely to receive public or private investment than their counterparts, and higher levels of educational attainment are associated with great infrastructure investment within the case cities of Chicago and Portland, USA (*ibid*).

The practice of cycling then is not homogenous. Instead it is a contested practice and as such, rather than discussing distinct performances of cycling, it is valuable to understand how elements of cycling may be utilised in various configurations and how particular elemental meanings, materials and competencies maybe valued more by particular cycling groups and communities in their performances of cycling.

3.1.1 *Perceptions of Safety and the Fear of Cycling*

Cycling can be easily romanticised, more often than not by enthusiasts themselves with their 'positive-inside' representations of pleasure often used as a principal motivation to encourage the uptake of cycling (Fincham, 2007). However, the fear of cycling is an important *emotional* barrier that is located in a number of contexts, materials and skills or lack of (Horton, 2007). This section draws upon research from a sociological perspective, focusing on the cultural and symbolic dimensions of cycling associated to the fear of cycling and perceived safety risks. What is evident is that the three elements of meanings, competencies and materials of social practice theory are used interchangeably by different groups, communities and individuals in order to negate or highlight fears of cycling and safety.

It is generally assumed accessories which attach to bicycles and clothing accessories can accommodate and 'contribute to greater safety, convenience, comfort, and enjoyment' when promoting utility cycling (Lovejoy and Handy, 2012, p.75). Reflective gadgets, flags, wearing high visibility clothing and cycle helmets are all associated to the safety conscious individual (*ibid*). In place of suitable bicycle infrastructure, devices can be utilised to alleviate safety concerns (Lovejoy and Handy, 2012) with regular riders challenging the view that cycling is inherently

dangerous and rather a matter of perception (Daley and Rissel, 2011). For them, an individuals riding skill and decisions about route selection, cycling style and clothing choice all enhance the safety of cycling.

Yet, the use of such of accessories to enhance safety is contested. Throughout the first half of the twentieth century, the CTC fought against the compulsory use of rear lights by cyclists, arguing that it would reduce the responsibility of the driver of an overtaking vehicle to avoid running down a cyclists in front of him (Horton, 2007). The wearing of 'specialist clothing', referring to both ''safety clothing' (e.g. high-visibility vests and helmets) and/or 'sporty clothing' (e.g. elastane shorts and leggings)', indicates a perception that cycling is dangerous and/or suggests it is an activity that requires much exertion, in order to cycle at a high speed to keep up with motor traffic (Aldred and Dales, 2017, p.349). People often wear safety equipment due to not feeling safe, primarily in relation to injury with motor vehicles (Aldred and Woodcock, 2015). Consequently, individuals cycling on protected cycle lanes are less likely to wear any specialist clothing or helmets (Aldred and Dales, 2017), and feel inherently safe when cycling away from motor vehicles (e.g. parks, cycle tracks, quiet streets) and hence do not wear safety equipment (Aldred and Woodcock, 2015, p.106). This obligation and encouragement of the cyclist to be seen and be safe by wearing safety clothing can make people feel cycling is less safe and therefore demands the association of cycling with danger (Aldred and Woodcock, 2015; Horton, 2007).

Studies highlighting media coverage of cycling also convey a negative image that instils a perception of cycling being a dangerous activity. Horton's (2007) study of cycle safety campaigning; especially in the context of child road safety, refers to safety campaigning actually inculcating fear (Horton, 2007). The UK Government's highway code for young road users 'Arrive Alive' conveyed messages to children that the world, particularly the transport network is a dangerous place, full of potential accidents and not a space for playing on bicycles with an emphasis on the child having to take care (Horton, 2007). Such attempts to encourage or normalise cycling and its associated accessories (for instance helmet use), may in fact risk further de-normalising cycling (Aldred and Woodcock, 2015).

As already commented, both on-road and off-road cycling environments are juxtaposed with one another. The majority of on-road cycle lanes reflect the use of white lines and coloured paint to mark the boundary between motorised traffic and space for cycling. At its best, this infrastructure aims to make cycling journeys more 'attractive, quicker, easier, safer, more pleasant' (Horton, 2007), yet cyclists can often feel marginalised in these spaces, particularly in relation to their own subjective feelings and perceptions of non-injury incidents. Cyclists, more so new cyclists (deemed to have less than 2 years cycling experience) experience on-road incidents where they feel other road users actively disregard their safety on a daily basis, contributing to a wider sense of marginalisation (Aldred and Goodman, 2018).

The perceived marginalisation and safety fears when cycling on the road is often compared to the UK's off-road provision, largely in the form of the National Cycle Network (NCN) (Horton, 2007). The popularity of this off-road cycling route, shared not with motorised traffic but with walkers, dogs and horses, may reflect a public perception of cycling predominantly performed in 'safe' and pleasant places, with 'normal roads' becoming no place to cycle and to be feared (Horton, 2007). Individuals would sacrifice directness (both distance and time) for a route that has less traffic, slower traffic, quieter streets and more places to stop and rest (Dill and McNeil, 2012; DfT, 2008). With the variety of cycling not just for transport but for leisure including BMX-ing, mountain biking, cyclo-cross, and track, Horton (2007) contends that new ideas of 'normal' are produced and with this the view of the 'cyclist-on-the-road' becomes 'out-of-place', less normal and less appropriate as a result of its interaction with motorised traffic. Occasional and non-riders highlight this perception of danger when cycling, listing the lack of safe places to cycle especially for transport cycling, yet recreational riding performed on off-road cycling routes generally considered to be enjoyable and healthy (Daley and Rissel, 2011).

With perceived 'safe' on-road infrastructure often lacking in British contexts, Spinney (2007) comments how this can be offset by an individual's competence and knowledge. Relating particularly on stretches of roads where interaction with traffic (particularly fast moving cars) is high, one individual slows the situation down by going slow herself, thus attempting to reduce the amount of sensory information she is being 'bombarded' with. On the other hand, others deal with situations differently

by attempting to minimise the speed of traffic by attempting to go as fast as possible themselves. Spinney (2007, p.39) argues "the ability of a rider to manipulate their environment is thus dictated by the skills and technology that they have at their disposal, both which are culturally framed." Here then, individuals may experience environments differently due to their own personal knowledge and competence or association (or lack of) to a cycling community, with the example of the bicycle messenger community highlighting a strong cultural framing, with strong bike handling skills, attention to bicycle technology and a perceived recklessness (Spinney, 2007).

Latham and Wood's (2015) vignettes of certain cycling performances of 'rule breaking, rule making, and rule bending' further highlights styles and techniques that actively alter the road into a safer and more efficient environment for cycling. The example of 'Dick's' attentiveness to the workings of the road infrastructure, more specifically the workings of traffic lights on a particular intersection allows him to create extra-legal rules and norms that allow him to cross the junction with speed and confidence (Latham and Wood, 2015, pp.309-311). This draws similarities to Aldred and Jungnickel's (2012) exploration of place creation through the concept of rhythm (as outlined in Lefebvre, 2004), with the reinterpretation of mobile spaces. The paper argues that social experiences such as group cycle leisure rides subvert and modify the rhythm of the normalised motorised streetscape to one that is more flexible and social through the use of speech and signals. It is accepted that roads are a functional space in which fast efficient movements are prioritised and social practices such as talking to one another whilst cycling two abreast on the road (although legal) disrupt the infrastructural settlement as the cyclists utilise the environment for *their* movement purpose. But it is also important to highlight other performances in which individuals, with weekend and recreational cycling experience, resort to becoming 'bike-wheeling pedestrians' at particular road intersections, due to infrastructure exceeding their abilities (Latham and Wood, 2015, pp.306-309). Furthermore, cycling training schemes teach individuals to cycle via convoluted routes because they are 'safer' than main-roads, focusing primarily on the practices and psychology of the individual, emphasising the responsibility of the individual to maintain personal safety. And whilst this strives to reduce casualties and convey cycling as 'safe', it

actually inculcates fear into those individual and provides disincentives to cycle (Horton, 2007).

This section has explored how the fear of cycling and issues of safety manifest themselves differently by various groups, communities and individuals. It is particularly important to draw to attention social practice theories meanings, materials, and competencies and how safety through knowledge, clothing, and infrastructure can construct different performances of 'safe cycling'. In using a social practice theory lens, further issues such as safety can be explored in understanding how different elements are interdependent on other elements, or how elements may be used in response to others (or the lack of). This is highlighted by Shove when commenting that objects, artefacts and infrastructures can determine boundaries of competence necessary to perform a practice (2017). This is often evident in cycling, as shown in regards to the lack of cycling infrastructure in British contexts being offset by and individual's competence and knowledge (Spinney, 2007). Whilst, individuals wear specialist clothing or helmets as a result of the lack of protection the road environment affords.

Shove et al., refer to the rise driving practices as a result of passing certain capacities from person to machine. Previous know-how that was embodied in the 'mechanic driver' was delegated to the vehicle itself, reconstituting the meaning of the practice in the process (Shove et al., 2012). Car owners became 'drivers', when they viewed driving as a means of making outings and sharing these experiences with friends and family. The mechanical demands which were previously critical, became more of a distraction, a nuisance, and possibly an embarrassment (ibid). As such, elements of meanings and materiality also co-evolved. Boundaries may therefore change with the introduction of new innovative material in which aspects and competencies may transfer from the human, to being delegated by the technology of the material (Shove et al., 2012). The example of the NCN highlights how this interaction between infrastructural materials and required human competencies informs understandings of cycling with recreational forms (on the NCN) being enjoyable and healthy, yet safe spaces for transport cycling (on the road) lacking (Daley and Rissel, 2011). In referring back to the research questions, it is also important to consider this in respect to how 'previous generations structure the careers and experiences of contemporary

carriers' or would be carriers (Shove et al., 2012, p.33) in constructing inclusive, or potentially exclusive ways of cycling.

3.1.2 The Stigma of Cycling

An individual who cycles is often termed a 'cyclist', yet the phrase can be, and often is, used as a negative connotation in which the individual is reduced to the mobility, defining and determining their identity. The construction of the 'cyclist' as a stigmatised performance, primarily in low-cycling countries, refers to and manifests itself in many ways, with practice theory highlighting that stigma can be associated to and located across all three elements of cycling (materials, meanings and competence).

For non-riders, cyclists on the road or shared paths are often framed as a public nuisance or risk takers and do not belong in such spaces (Daley and Rissel, 2011). Particular performances, which do not obey road rules such as riding without helmets, cycling through red lights and against the flow of traffic, tainted their view further. Yet as Daley and Rissel (2011, p.214) show, certain perceptions of cycling misbehaviour such as cycling in the middle of lane reveal the lack of knowledge about a cyclists legal rights. Those who cycle defend certain behaviours and instead question the validity of applying road rules that are designed for motorists (Daley and Rissel, 2011). This is connected to the wider transportation system in which Horton (2007) argues that the stigmatisation and 'othering' of cycling deflects attention away from greater crimes, sacrificing the cyclist in the pursuit of 'motoring-as-usual'. In representing the practice of cycling as 'deviant', competing mobility practices such as driving are reaffirmed as 'normal' (Horton, 2007).

Pooley et al. (2013) also connects to the symbolism of the car vs. the bicycle in reference to status. Whilst the car demonstrates 'making it' in society, to ride a bike communicates and demonstrates a lack of financial ability to buy a car. Within low-economic contexts, bikes are associated as the 'preferred mode of transport for drug dealers and the criminal fraternity' (Pooley et al., 2013, pp.135-136). And where cycling levels are low, it is often 'othered', defined as something certain kinds of people would do but none of these 'others' being worthy of emulation.

Popular media discourse can also contribute to the stigmatisation of cycling. A Lancashire County Council road safety campaign in 2005 labelled people cycling a 'saint or sinner' based on their decision to wear a cycle helmet or not (Horton, 2007). Although cyclists are at a lower risk of head injury than motorists, pedestrians and children at play, it is questioned why none of these groups are questioned to wear helmets (Horton, 2007). Instead, sinners were given the opportunity to 'repent' through a pledge to 'mend their ways' and always wear a helmet when cycling. Certain acts such as listening to personal audio devices may also conjure negative perceptions of the 'cycling zombie' from the 'outside'. Yet Jungnickel and Aldred (2014, p.252) convey how devices are 'carefully considered, spatially shaped and socially negotiated'. Cyclists comment on buying headphones that allow external sounds to merge with the audio from mobile in order to maintain awareness; for others it provides a motivation to commute and exercise rather than to take the car; whilst some cyclists would only use a personal audio devices when cycling away from motor traffic in locations that did not require high levels of alertness demanded of a cyclist (*ibid*).

The stigmatisation of cycling is not only evident from those on the 'outside', meaning those who do not cycle, but it is also evident on the 'inside' amongst those who do cycle. In constructing the 'good cyclist', those who ride perceive an individual has to successfully manage traffic, be self-sufficient in the maintenance of their bike as well as wearing the correct equipment such as a helmet, lights, and a high visibility jacket (Aldred, 2012c). Many of Aldred's respondents expressed their anxieties of not living up to the expectations of this. As such, the 'other cyclist', defined by those who cycle themselves, is often criticised for cycling at night without lights, moving unpredictably on the road and without indicating, jumping red lights, riding the wrong way up streets or one-way streets (Skinner and Rosen, 2007, p.92). Those cycling for utility and commuting reasons often felt they had less status and acceptance to those cycling for sport or recreation. Whereas, the vulnerability attached to cycling for physical activity in public space is especially fearsome for novices, returning cyclists and those of a self-conscious nature in general. What to wear (and what accessories to use) is often feared what it might signal about those who wear it, and thus attempt to find a middle ground between 'everyday clothing' and cycle-specific clothing (Aldred, 2012a).

In methods to deal with such fear of appearing inept, people do not receive formal training on how to ride a bike or repair it, as well as reverting to cycling as an indoor health practice on static bikes in the gym, away from the public gaze and away from the watchful eyes of others (Pooley et al., 2013; Horton, 2007). If individuals are unable to properly perform cycling and wear items defined as 'danger gear' (not using lights, wear black clothes or wear non-reflective clothing) they are deemed incompetent (Aldred and Woodcock, 2015). Yet being sporty, wearing full body lycra or abnormally enthusiastic results in being a 'bike nut' or a 'hard-core cyclist' and thus 'too competent' (Aldred, 2012c). Even in cities where cycling is normalised, it is judged and stigmatised. This is illustrated by individuals who cycle every day still distinguishing a type of 'othered' cyclist who wears lycra, cycles large distances and emphasises speed. Consequently, individuals are often at risk of being perceived either as incompetent or too competent.

In considering social practice theory's distinction between practices as entities and as performances, it is possible to distinguish variations within a world of practices (Hui, 2017). It is possible then to consider how particular performances of cycling can be stigmatised or othered within the broader entity of cycling. Hui's development of 'variations of practices' reveals potential limits to tolerable variations, in performances such as cycling whereby some variants are encouraged and others discouraged through the *elements* used and the meanings associated to this. This is evident in Daley and Rissel's (2011) statement of those who ride contribute to various 'classes' of cyclists referring to their relevant status, predominantly differentiated by the style of bike, purpose for riding, types of accessories and clothing worn by riders. As already discussed in this section, stigmatised or 'othered' performances cannot be boiled down to one specific element. Materials, particularly in reference to accessories (or the lack of); the competence and knowledge of how to 'correctly' cycle and negotiate the road environment; and meanings attached to cycling as conveying environmental and sustainable credentials can all act as negative elements in the development of cycling. Interestingly then, it can be questioned to what extent particular elements in a performance can determine a negative performance and whether one element in itself is enough to stigmatise a cycling performance, regardless of the other elements utilised and configured in the performance.

Social Practice Theory also highlights that individuals distinguish types of involvement and levels of knowledge in order to "articulate different variants of meaningful participation in the practice and the communities that gather around them" (Hui, 2017, p.56). As such the enactment of such performances establish meaningful boundaries in within which practices are constructed and understood (*ibid*). For those who do cycle, the bicycle can contribute positively to their own identity and meanings relating to social, ecological and environmental issues. Cycling in suburban middle-class contexts is often understood as conveying environmental awareness and making a sensible and rational choice between less sustainable methods of transport such as the car (Pooley et al., 2013). However, these meanings associated to cycling whilst perceived as positive can also frame a negative image of cycling. Daley and Rissel (2011) analysed how in Australia, what might be conceived as positive images of cycling by those who ride are in fact framed negatively by those who don't, with cyclists being stereotyped as 'greenie activists'[3], militant students or elitists. These strong identities can also manifest into feelings of marginality and construct an outside status by the performers themselves. For these sub-cultures, there is a strong association of self-identity in which people want to see themselves as unconventional and 'cool' within a sub-culture (Fincham, 2007). But, this marginality enhances an 'othered' status not only for those particular cycling sub-cultures, but also cycling more generally (Fincham, 2007). Whilst cycle messengers contribute to cycling levels very little, this 'sub-culture' or 'lifestyle' of cycling can contribute negatively to the portrayal of cycling as a whole (Fincham, 2007). As such, it is argued that particular performances, or as it maybe defined here, particular elements can give all cyclists a bad name, irrespective of whether they were included in the individuals performance (Daley and Rissel, 2011; Skinner and Rosen, 2007).

In reference to cycling advocacy and campaign groups, 'Londoners on Bikes' emphasised a strong activist narrative of not identifying as a 'cyclist' or with 'cycling' as these were perceived as problematic terms that either dehumanised or stigmatised

---

[3] Daley and Rissel (2011, p.215) highlight that the data was originally collected in 2005 and the negative 'green' labeling might now be viewed more favorably due to growing media attention and wider discussions around climate change.

people (Aldred, 2013). This 'pop-up' social movement considered a particular time-limited aim of influencing a Mayoral election and re-consideration of its bicycle identity. By emphasizing other identities associated to cycling such as 'Londoner' and 'commuter', the campaign was able to draw other people in to the discussion as a result of the open-ended identities these words portrayed. The identity of a 'commuter' enabled a creation of a defensible identity, legitimising the use of road space and enabling paid work. Whilst being a 'Londoner' also enabled this attempt to remove the use of the stigmatised cyclist label and assumption that cycling was a niche practice and instead utilised broader narratives. The search for attachment to other identities also related to the interest in bicycles primarily in regards to politics rather than specifically to do with bikes. It therefore connected to both identity and issue goals of the group, broadening the aim to transform urban space, focusing on more than just benefiting 'cyclists'.

In contrast, the example of the London Cycling Campaign (LCC), who considered a name change to 'London Cyclists', juxtaposes the argument against that of Londoners on Bikes. For LCC, the identity of a 'cyclist' was less of an out-group and off putting than that of the word 'campaign' (Aldred, 2012b). What is important to consider here is that institutions (including cycling advocacy groups, campaigns as well as local and national government) are engaged in the development of cycling and have the opportunity to shape the set of elements in cycling through them being incorporated and utilised in performances (Hui, 2017).

3.2   Transport Planning and Policy Practices

Practices of cycling are not only constructed and negotiated by those who perform the practice. In using social practice theory's 'system of practice' it is possible to understand producers, providers, and the state itself all develop and circulate elements of which social practices are formulated from (Shove, 2010a). System of practices acknowledge how patterns of practice such as cycling "are produced and held in place by multiple, and sometimes seemingly unrelated, infrastructures, institutions and policy domains" (Macrorie, Daly and Spurling, 2014, p.17). However, in reference to transport planning, the system of automobility remains a dominant and obdurate system in which the practice of cycling remains marginalised and outmoded. This

section of the chapter discusses this competition between cycling and driving within a wider socio-technical system before discussing hard and soft interventions associated in the aim of growing the cycling practice population.

From a historical standpoint, the dominant response of transport planning in the post-war period (of the Second World War) proceeded through an approach termed 'predict and provide'. With the increase of mobility not showing signs of slowing, this approach argued for the supply of roads to meet this demand. As a result new roads enabled the increase of traffic to be realised in a self-fulfilling fashion (Dennis and Urry, 2009). Perceived as road building that would ease congestion, the 'predict and provide' paradigm has become widely criticised for the encouragement of more car use (Aldred and Golbuff, 2011). Predict and provide necessitated the radical reshaping of cities in order to facilitate the movement by private car and became part of an overarching discourse of what Gunn (2010) terms urban modernism (Parsons and Vigar, 2018).

In the twenty-first century, the limitations of 'predict and provide' and its devastating impact on urban areas became known and resisted (Parsons and Vigar, 2018). With the supply of new road space as a factor in generating additional demand, the perception of new roads needing to be constructed to cope with traffic levels was therefore rejected with a view of congestion as an outcome from the construction of new roads. 'Predict and provide' has been widely discredited and partially displaced by what Banister terms a paradigm of sustainable mobility (*ibid)*. But whilst the latter of the 1990s has marked a significant shift within policy discourse away from the 'predict and provide' paradigm this hasn't translated into a unified and comprehensive cycling policy document within England. The car-system still holds strong in transport planning, reflecting a dominant car culture. This refers to a wider and more complex system at play, which locks individuals into the car and the wider organisation of society. The *manufactured object*; *individual consumption* of sign-values; *complex* interlinkages with other industries; the reorganisation of *mobility* in daily life; dominant *culture* and major discourses; and the scale of *environmental resource-use* created a system of fluid interconnections (Urry, 2004; Sheller and Urry, 2000). Within this socio-technical system, the car enables a level of freedom, 'freedom of the road', in which the ability to travel at speed, whenever during the

day/night and in any direction in relation to the complex infrastructural provision of roads and motorways. Sheller and Urry (2000) therefore assert that automobility coerces people into this intense flexibility in which 'fragments' of time and space are juggled forming complex but fragile patterns of social life, which only the car can fulfill.

Practices of driving and cycling then can be considered in *competition* with one another. In regards to the competition between systems of automobility and velomobility, practices compete for space in which space is used in different ways and therefore defines goes on within it (Shove et al., 2012). Mobility practices of cycling and driving share common elements such as road infrastructure, which act as sites of competition and contestation (Shove, 2012). Yet, planning for cycling post-second world war has largely been marginalized, in which the bicycle has been essentially 'outmoded' and delegitimised through the planning, implementation and institutionalisation of 'automobile modernism' (Parsons and Vigar, 2018). Emanuel's (2012) review of Stockholm's urban traffic planning highlights a binary of the car or pedestrian system with urban planning principally designed for either of these two mobilities. Like the British context, cycling was essentially rendered invisible and outmoded, caught between pedestrianized environments of town centres and motor-dominated spaces such as urban ring roads (Aldred, 2012b). Cyclists were able to use pedestrian paths, yet these created difficulties due to paths leading to pedestrian only zones; visibility being inadequate and curb separation between pedestrians and cars causing difficulties when wanting to cross (Emanuel, 2012, p.76). Urban planners and engineers primarily defined cycling as a local means of transportation but was disregarded as a utilitarian form of commuting. As a result, "while bicyclists had access to the local network of (pedestrian) paths and its extensions outside the suburbs, the quickest routes to the inner city were reserved for motor traffic" (2012, p.80). The bicycle as a local mode of transport was therefore translated in the planning and construction of infrastructure (ibid).

Throughout the 1970s cycling continued to be cast as a localised issue and primarily a local concern. The 1980s signalled the continuation of cycling being left off of mainstream policy agenda's with the White Paper 'Roads to Prosperity' heralding what was described as the greatest road-building programme 'since the Romans'

(Aldred, 2012b, p.89). The state gradually ceased to be the supreme regulatory body and environment NGOs gradually sought to play a part in a new multi-layered and multi-actor policy network, which have attempted in prioritizing both environmental and social issues (Spinney, 2010, p.187). In the United Kingdom, several environmental and transportation organisations formed during this time including Cyclebag (now formally known as Sustrans), London Cycling Campaign, Transport 2000 (now Campaign for Better Transport), Greenpeace and Friends of the Earth (Aldred, 2012b, p.88). The larger national non-state organisations such as Sustrans engaged with a level of co-operation and engagement with the state throughout the 1980s and expanded to infrastructure delivery throughout the 1990s[4] (Aldred, 2012b). Such organizations reflect fixed organizational structures, which work through the well-established discursive channels and forums in which to exert political influence (Balkmar and Summerton, 2017). The example of Sustrans, as well as Cycling England, demonstrates the incorporation of cycling advocacy into structures of cycling policy formation and implementation, presenting a somewhat 'arms-length' UK cycling policy approach (Balkmar and Summerton, 2017).

The main resurgence of interest in cycling dates back to the 1990s (McClintock, 2002, p.18). Aldred attributes this to a new stance in relation to the environmental problems and protests in the news, configuring issues around three key themes of congestion, safety and health, and sustainability and the environment (2012b, p.89). With the hollowing out of the state and the political shift away from nationally led Keynesian state, cycling advocacy remained largely in the hands of local authorities, an 'add on' not incorporated within the strategic transport network (Aldred, 2012b). Local authorities have often had to interpret and piece together various government documents to ascertain what the government was advocating as cycling policy. Although it was acknowledged that road conditions had to alter for cycling to prosper, the lack of regular and consistent funding provided for cycling made the status quo on car dependence for both local authorities and users difficult to shift. During the Labour administration (1997-2010) cycling advocacy remained at arms length from the central state with the quango 'Cycling England' (abolished in 2011) relying on a

---

[4] Their most notable delivery of infrastructure during this time was the National Cycle Network, awarded in 1995 under the Millennium Lottery fund.

cross-section of government departments, primarily the Department of Health, to fund the vision of getting 'more people cycling, more safely, more often' (Aldred, 2012b, p.90). Funding achieved as high as 80 pence per year per UK resident and as a result generally focused money on specific localities in order to maximise impact (Aldred, 2012b). Even with the Department of Transport's 1994 'Blueprint for Cycling Policy' that established policy intentions for cycling at a national level for the first time and the establishment of the National Cycling Strategy in 1996 which set out to establish a culture that favoured the increase of cycling through 18 objectives, there was still a lack of funding to action these. None the less, the advance of concrete objectives in achieving an increase of cycling still marked a breakthrough in UK transport thinking (Aldred and Golbuff, 2011, p.17).

Aldred and Golbuff's (2011) historical review of cycling policy in the UK reveals a disjuncture between cycling and the rest of transport policy. Similarly, Aldred concludes that UK cycling policy includes three important traits: firstly an arms-length policy approach, incorporating advocates within structure of policy formation and implementation; funding levels which continue to lag behind countries with an established cycling population; and thirdly, cycling becoming associated broadly with 'sustainable' or 'active' discourses relating to public health and the environment, rather than being associated to and foregrounded within mainstream transport (Aldred, 2012b, p.91).

3.2.1   Hard and Soft Cycling Interventions

Measures of transport policy can be divided into both 'hard' and 'soft' measures. It is here where issues arise with the over exertion and emphasis on softer measures which further emphasises the need of the individual to change and alter to fit the system. Hard measures generally relate to improvement in infrastructure and public transport services as well as increased stipulation on car use such as congestion charging or other increases in cost in order to prohibit or ration car use. Buehler and Dill's (2016) review on bicycle networks effects of cycling reveals that bikeway networks have a positive relationship with cycling levels, with separate paths and/or cycle lanes preferred over cycling in roadways with motorised traffic. Whilst Yang et al.'s (2019) review of the relationships between cycling and built environment characteristics

(2007-2017) highlights the importance of street connectivity and the presence of cycling paths in enabling cycling for commuting and other transportation purposes. Other built environment factors however, such as land use mix and density have a weaker or mixed association to benefiting cycling (*ibid*). What is also apparent according to Buehler and Dill (2016) is a hierarchy of preferences by cyclists and non-cyclists, in which some more experienced cyclists preferred riding in traffic with cars over that of cycling on separate facilities (Buehler and Dill, 2016).

Implementing hard measures however is difficult due to public opposition or political infeasibility (Bamberg et al., 2011). The importance of soft measures has therefore become increasingly important. The dissemination of information and encouragement through promotional activities, media campaigns, and educational events are used in the attempt to influence the switch from the car to more sustainable methods of travel through voluntary means and behavioural strategies. Examples of these soft interventions to promote cycling include travel programs (personalized travel planning, workplace travel plans and school travel plans), marketing of public transport, travel awareness programs, trip reduction programmes, individualised marketing (aka smart trips), safe routes to school, bicycling specific programs, and education and training (Bamberg et al., 2011; Pucher et al., 2010). These programmes are suggested in being successful in reducing vehicle use but the shift towards cycling is rather minimal. Rather, increases in walking and transit use far exceed cycle use in all the studies reviewed by Pucher et al. (2010) relating to these programs.

When attempting to attribute the increase of cycle usage in relation to a particular intervention, difficulty arises due to the general coupling or multiple uses of interventions (Scheepers et al., 2014; Pucher et al., 2010). Pucher et al. (2010, p.121) admit, "It would be virtually impossible to disentangle the impacts of each individual measure". Their extensive review of 139 studies, conducted since 1990 on both peer reviewed journal articles and non-peer-reviewed studies by both governmental organisations and non-governmental organisations concluded that a mixed approach of both soft and hard measures is necessary in encouraging cycling, something that is seconded by Oosterhuis (2014). Buehler and Dill (2016) comment that quantitative studies typically fail to control for many soft policies and thus remains unclear to what extent hard infrastructure entices "individuals to cycle and to what degree car

73

restrictive policies 'push' people to consider cycling as an option" (Buehler and Dill, 2016, p.22). Although, particular interventions may be suitable and more effective to be marketed together such as cycle to school programs being promoted in areas where traffic calming polices are also being implemented (Scheepers et al., 2014; Pucher et al., 2010).

With this being said, the coupling of push and pull factors has been somewhat limited. The lack of political will in implementing push factors due to the fear of losing electoral votes has led to an:

> "Unwillingness of most British politicians (from any major party) to commit to policies that are perceived as targeting motorists: they are happy to support strategies to promote more sustainable forms of travel so long as the freedom of the motorist is not affected" (Pooley et al., 2013, p.169).

A wide problem is disconnecting from this car culture and connecting towards a cycling culture for the fear of the perceived attack on the former (being 'anti-car'). As Batterbury (2003) interprets, transport policy in the 1990s in Britain was a victim of this with proposals including eco-taxation later 'watered down' and onus past down to local government level without substantial funding provided. The automobility system configures all around it to justify its means and to disrupt the 'other', resultantly leading to the abandonment of the push and pull dual approach. As a result of push factors being abandoned, a policy discourse on cycling that promotes and encourages individuals to navigate the current status quo of the transportation system exists.

In considering practice theory and its opportunity to understand interventions further, Shove (2010a) illustrates that practices are not relevant to the issues of behaviour change as it is currently narrowly defined. Watson's (2012, p.488) acknowledgement of the lack of success regarding 'soft' interventions such as 'education, persuasion and economic incentives' leads him to suggest that an alternative approach of human action is necessary to inform interventions. Spotswood et al. (2015) argue that the current lack of success on soft measures, which target the individual, is seemingly down to the lack of altering contemporary structures of practice. It is these structures

that reproduce the current status quo and therefore the simple persuasive tactics targeted at the individual's psychology does little to overcome this. By approaching cycling cultures through Shove et al.'s (2012) social practice framework of analysis, the approach provides a benefit in shifting the debate away from the individualistic blaming to a support of interdisciplinary intervention design. As a result then, practice theory posits, "humans, artefacts, organisms and things of nature are variously but unavoidably enmeshed in social life" (Shove, 2017, p.1). Schwanen et al. (2012) consider that the individuals behavioural decision-making is relatively insignificant when compared to automated meanings and connotations embedded within society currently. None-the-less, they contribute to the formulation of social practices, which can be succinctly outlined through Shove et al.'s (2012) materials, competence, and meanings.

3.3   Advocacy, Activism and the Involvement in Policy Practices

Developing upon the previous chapter section and social practice theory's 'system of practice', it is important to consider the relationship between cycling practices and advocacy and activism of local cycling culture. This section discusses role local cycling culture plays in their contribution to a popularization of cycling elements through their visions and performances of cycling in order to understand trajectories of cycling as an urban mobility. In regards to social practice theory, it is useful to consider 'communities of practice' throughout this section in how cycling advocates and activists can give rise to both meaningfulness, but also potentially holding people hostage to a particularised way or experience of cycling (Wenger, 1999). The first section of the chapter discusses the role of cycling campaigns, highlighting particular methods of advocacy and activism, whilst the second section builds upon this in understanding how such groups and communities advocate for particular cycling environments, which dictate particularised performances of cycling. The third and final section refers to a number of spaces *of* cycling, which highlight physical spaces of the cycle workshop, cycle hub, and bike cafes that all contribute to and popularise particular understandings and performances of cycling.

3.3.1 Cycling Campaigns

In considering the role of advocacy and activism of cycling campaigns the strategies and interests have focused more generally on their immediate environment. Batterbury's example of the 'Ealing Cycling Campaign' (ECC) refers to a variety of engagement methods cycling campaigns maybe involved in, including: leisure rides, lobbying, planning matters, and other campaigns broadly associated to pro-cycling concerns (Batterbury, 2003). Such groups are generally dependent upon their members, with groups altering their approach, assisting at certain events or carrying out certain tasks in regards to member's time, ability and skills (*ibid*). This results in some members remaining dormant for months only to become active when other structures of their life allows them or issues arise which relate to their interest and skill set. Yet this varied approach can result in a juxtaposition and contradiction of aims and objectives. Whilst some members engage politically arguing the unsafe nature of cycling in today's environment, others within the organisation are engaged more for the pleasure of cycling as a leisure activity (Balkmar and Summerton, 2017).

This raises a distinction here between advocacy and activism. It can be considered here that cycling groups who may advocate for cycling would engage more so with those who do and do not cycle, attempting to promote and circulate elements of cycling in the aim of increasing the cycling population. Whilst cycling activism is more concerned with political structures and the broader 'system of practice'. As such governmental institutions are emphasised as key spaces in which to enact change and influence or demand new ways of cycling. Cycling groups may engage with both methods of advocacy and activism, but it is important to consider here how such practices of campaigning can contribute to different interventions within the practice of cycling.

In reference to cycle advocacy groups, some may organise various cycle rides and cycle training sessions which enable users to learn new skills and engage in a positive cycling environment with others, that they may not necessarily experience when cycling on there own. Such groups may also be more collaborative with local government officials engaging with them on issue based advocacy campaigns (Batterbury, 2003). The example of Londoners on Bikes refers to the politicisation of

the cycling debate, but it stopped short of alienating those who engaged by not identifying specific demands of what cycling should be and instead stated that it is the responsibility of state structures to define cycling practices (Aldred, 2013). By not attempting to define particular cycling standards, this enabled the involvement and participation of a wider range of individuals who didn't necessarily consider themselves as semi-professionalised bicycle activists or willing to get bogged down in technicalities appropriate to cycling experts but rather advocate for better cycling infrastructure.

Batterbury (2003) comments that some groups work best when engaged actively with state institutions due to these being assumed gatekeepers of the 'metropolitan streetscape'. This engagement with decision makers has led to examples of formalised transport planning knowledge of those decision makers (relevant state and local authorities) being coupled with experiential cycling knowledge. The social dynamics of cycling group members (such as member's job profession) is integral in legitimising their opinions and arguments put forward on local transport issues and highlights a form of cycling activism. This reflects the broader post-modern 'collaborative turn' in planning with the involvement of its users. These cycling groups or 'social networks' cannot enforce sustainable patterns of travel among urban citizens, but rather only probe, suggest and help modify the road network and streetscape (Batterbury, 2003, p.165). These 'small social networks' are deemed to provide 'carrots' whereas regulatory bodies and the state itself have the ability to provide 'sticks', thus cycling groups involved or engaging in 'nudging' such bodies towards this direction is seen to be critical.

Aldred comments that, "during the 1990s and 2000s, many cycling groups were partially assimilated into local state organisations, participating in expert-led exercises often delivering relatively limited (if any) improvements" (2013, p.195). She raises an issue here in that cycle campaigns run the risk of being co-opted into these institutions key agendas, being 'used' and restricted in their ability to provide fresh, new, and maybe even radical ideas. Batterbury (2003) highlights this issue in regards to the case of the ECC who attempted to maintain a working relationship with local government that also retained political autonomy, enabling space for action and

debate. It is argued as such that partnerships remain hierarchical and fall short of the communicative rationality that it seeks to promote.

This overlap between cycle campaigning and policy-making knowledge emphasises the hollowing out of the state. Such processes refer to the underlying issue of recession within local government in which "local government cuts bite, posts are lost, and remaining local authority officers attempt to 'do more with less'" (Aldred, 2012b, p.95). Yet, whilst 'lay' experience (everyday, casual common-sense understanding) may be utilised by such policy and government structures, it is also perceived to de-legitimise such involvement whereby professions and professionals come to value the established 'expert' culture (verifiable empirical observations and distinctive techniques) (Spinney, 2010; Batterbury, 2003). Report writing, street surveys, aligning with pro-environmentalist camps within the council as well as personal jobs within and in relation to the city council and transport are sought to demonstrate and legitimise members competences as amateur planners (Batterbury, 2003). Whilst other campaigners adopt particular practices and languages of transport professionals, as well as establishing dedicated branches/subgroups in order to be taken seriously and maintain and develop such professional practices (Spinney, 2010). This leads Spinney to argue that it is not the lack of knowledge that campaigners have but the form it takes which excludes the campaign groups from such debates. Thus, campaigners are forced to learn and adopt such language and practices used by planners and engineers in order to legitimise their own voice (Spinney, 2010, p.200).

Cycle campaigning is generally done in campaigners spare time and on a voluntary basis. Whilst liaising with the council may result in public exposure, debate and valuable strides for groups, much of the time this result in a mild form of citizen 'participation' rather than real inclusion in formal planning (Batterbury, 2003). Frameworks and meetings are established to understand and utilise lay experience of cycling campaigners by local authorities but they are still criticised by campaigners in marginalising such knowledge and experience (Spinney, 2010). The LCC criticized that their involvement in route selection and design appeared to be limited to commenting on a pre-determined route by a number of 'expert' groups and meetings with such groups sought only 'good news' about cycling and nothing critical or negative (Spinney, 2010, p.196). This marginal status and role such groups have in

regards to the value of their knowledge and input is regularly contrasted to dominant stakeholders and the maintenance of their 'expert wisdom' (Spinney, 2010).

Whilst this section provides a positive view of engagement between cycling campaign groups and local government structures, empowering traditionally excluded groups, it may also contradict the collaborative turn in eroding democratic decision-making by elevating non-elected representatives to speak on behalf of a community or group (Spinney, 2010, p.188). Whilst cycling issues maybe considered and proposed routes and improvements formularized and carried out, it raises the question of whom this benefit relates to what particularized cycling community benefits from this (Spinney, 2010). It is critical therefore to consider and question here the benefit this has to the practice of cycling or more importantly how this affects the trajectory of cycling. Considering that cycling groups such as cycling campaigns and advocacy groups are where 'communities of practice' most likely exist, they provide sites of interaction between practitioners and particular elements of practices, including norms, images and rules (Macrorie, Royston and Daly, 2014). It can be questioned whether such campaigning maintains a particular way of cycling, protecting and enabling those who already cycle, or whether such space are places of opportunity and innovation in which new cycling practices can develop and emerge from (*ibid*).

3.3.2   *Space for Cycling*[5]

While cycle performances are varied there is one particular contestation predominantly within cycling advocate and activist groups in the form of promoting infrastructure associated to vehicular cycling (Forester, 1992) and those promoting physical separation from motorised traffic. The Internet as a platform has become increasingly utilised through various forms of social media in which cycling movements have benefited from with blogs, Facebook groups, and Twitter providing sites to share, discuss, comment, complain and scrutinise material relating to cycling (Balkmar and Summerton, 2017; Aldred, 2013). With online activism 'booming',

---

[5] I use the term separate over that of segregate throughout this research unless direct quotation uses the latter. I do so as a result of the negative connotation 'segregation' conjures and its association throughout a wider discourse of life.

Aldred (2012b) associates some of this to the CEGB and the new wave of cycling activism. But this new wave of cycling activism doesn't necessarily continue in the same vein as previous cycling groups. Cycling blogs generally from 2007 onwards have often been critical of previous cycle advocacy approaches and visions of cycling which refer to shorter-term, issue based advocacy campaign and cycling politics (Aldred, 2013). In particular, the dominance of 'vehicular cycling' and its institutionalisation within general cycling policy.

Vehicular cycling refers to the operating of bicycles like motor vehicles, learning to be comfortable in riding with motor-traffic on roadways. A keen advocate of this approach, John Forester, outlines and details this vehicular cycling in which he argues:

> "THE MOST IMPORTANT THING TO REMEMBER IS TO THINK AND ACT LIKE THE DRIVER OF A VEHICLE, to learn how other drivers act and how to conform to the traffic pattern. CYCLISTS FARE BEST WHEN THEY ACT AND ARE TREATED AS DRIVERS OF VEHICLES." (Forester, 1992, p.28)

Historically, vehicular cycling performances are evident within UK transport policy with the DfT's 'Hierarchy of Provision' (2008) (Figure 3-1) referring to the reliance and preference of on-road cycle provision first and foremost. The DfT (2008, p.10) comments in the *Local Transport Note 2/08*:

> "1.3.2. The road network is the most basic (and important) cycling facility available, and the preferred way of providing for cyclists is to create conditions on the carriageway where cyclists are content to use it, particularly in urban areas. There is seldom the opportunity to provide an off-carriageway route within the highway boundary that does not compromise pedestrian facilities or create potential hazards for cyclists, particularly at side roads."

Consider first ↓	Traffic volume reduction
	Traffic speed reduction
	Junction treatment, hazard site treatment, traffic management
	Reallocation of carriageway space
	Cycle tracks away from roads
Consider last	Conversion of footways/footpaths to shared use for pedestrians and cyclists
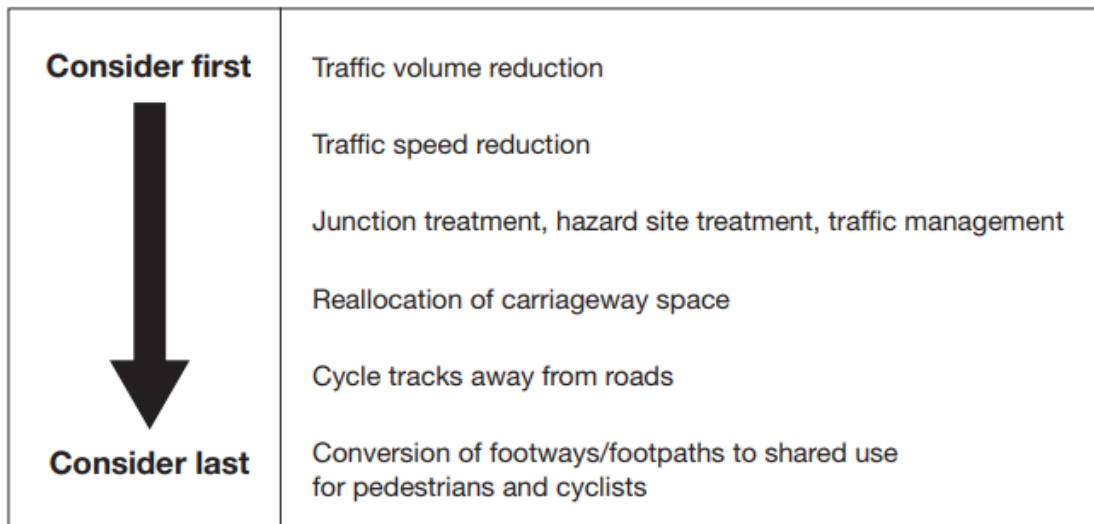
Figure 3-1 Cycling Hierarchy of Provision (DfT, 2008, p.10).

Reid (2017) traces the rise of vehicular cycling back to John Forester's opposition to the supposed mandatory use of bikeways in Palo Alto, USA that were being constructed in the 1970s. More generally it is assumed that this separation would reinforce the marginalisation of cycling within the transport environment (Aldred, 2012b). This refers back to CTC's historical assumption of losing legitimacy on British roads had they accepted the enforcement of using cycle paths. This prediction is somewhat corroborated by the Republic of Ireland's experience of the mandatory use of cycle facilities next to the roadway if present (this has been revoked since, but is still heavily debated). This was heavily criticised by local cycling campaign groups due to the lack of quality of cycling facilities provided, in which cycling was generally subordinate to other modes of mobility (Aldred, 2012b).

UK cycling policy documents stated in an ideal world cyclists would have their own tracks, yet casted separation as 'too expensive, too difficult, and a local responsibility' along with other policy makers and advocates viewing separation as undesirable in principle (Aldred, 2013, p.194). This has lead to a general perception of a dual network within the UK whereby utility cyclists are expected to use the roads whilst leisure based and less confident cyclists prefer the use of off-road and traffic free routes (Aldred, 2013). Examples of extensive urban cycle networks separated from motor traffic in Britain do exist, however cycling levels do not replicate those found in Northern Europe. While provision for separated cycling infrastructure is promoted

as best practice by contemporary cycle advocacy and campaigning groups, Reid (2017) highlights that this is not enough. Eric Claxton, chief engineer of the UK's first New Town, Stevenage, developed smooth and wide cycleways adjacent to the main roads, separated from cars and pedestrians. The cycleways were well lit, connected to key amenities such as schools, workplaces and shops, and were held up as good practice in the 1970s. Yet the multimodal transport system of Stevenage provided equally for all modes of transport, while the bicycle had its spacious and well-connected cycleways, so did the car. The New Town was designed to be highly convenient for motorists: cyclists were removed from the roads, roundabouts kept swift and traffic lights kept to a minimum (Reid, 2017). Whilst Reid highlights the need to constrain competing mobilities, particularly the car when attempting a cycling revolution, he also raises the importance of cultural and political perceptions associated to mobilities, particularly that of the bicycle signalling poverty and the car being an object of desire at that time (Reid, 2017, p.174).

Forester himself had no interest in getting more people on bikes and acknowledged cycling was a minority activity (Reid, 2017, p.156). It is contended that such integrationists, especially in particular relation to the USA bikeway movement, have provided governments with the excuse of not needing to spend on cycling infrastructure and the continuation of a lack of specific cycling infrastructure (Reid, 2017). This has led to a great schism within cycling advocacy circles in which vehicular cycling advocates an integrationist approach to cycling practices in using the road network with the side lining of cycling leading to its undermining with the transport network. In comparison, separationists propose growing cycling through the provision of separated infrastructure, which reflects current international best practice, namely the Netherlands, calling for enforceable national standards. Whilst both acknowledge cycling as a method of mobility, it opens up questions as to how cycling is envisioned, imagined and constructed as a practice, particularly in relation to infrastructural systems which may script distinct performances through its interactions with infrastructures of cycling.

3.3.3 Spaces of Cycling

Transport identities exist in a dynamic relationship with other social identities that can influence and shape one another (Aldred, 2013; Skinner and Rosen, 2007). Sherwin et al. (2014) argue travel behavioural studies are paying increasing attention to the influence of social networks and social relationships in travel behaviour change. Social support from friends or work colleagues play a vital role in promoting cycling and can provide practical knowledge and support (Aldred and Jungnickel, 2014; Aldred, 2012a). In low-cycling contexts, this support in the form of showing someone the best way to cycle to the office; alternative routes that do not include unpleasant roads or intersections; gifting or passing on bicycles or cycle clothing; or providing advice on the best accessories to buy provides a support mechanism in promoting cycling (Aldred, 2012a). Skinner and Rosen (2007) identify that a 'workplace cycling culture' exists in places where cycling to work is built into the structure of the organisation and not just a choice made by specific individuals and where different cultures and values are held within the organisation such as sustainable transport, environment, staff welfare and the local community. Such values are embodied or made material within the organisation through such things as Cycle-Friendly Employers Scheme (*ibid*).

We make sense of identities not through the recording of attributes of the individual, but by comparing and establishing relations between others (Smith, 2000). The understanding of cycling culture is therefore never achieved in isolation but part of a social and collective process which informs and influences the individuals understanding of being a cyclist (Pooley et al., 2013). Psychological factors of the individual including perceptions, self-identity, beliefs, social norms and habit have become increasingly well-used in the social sciences and extends to the broader focus of this research on cycling culture. Culture and identity is never 'achieved' or 'established' as this would imply a sense of completion. Rather, individuals are constantly engaged with one another as social actors producing and mediating identities that are fluid and in flux, prone to change.

Horton's (2006) term of 'cultural architecture' coveys how identities are not only limited to human interaction and the performances of lifestyles, but they are also

identified in the space and places people situate themselves in. Neither wholly concrete nor purely metaphorical, cultural architecture not only comprises of materialities but also groups, spaces and times (Horton, 2006, pp.146-147). Although utilised in the case of 'environmental citizenship', this construct reveals how the performance of green activists through their identities become spaced and materialised in specific structure they inhabit. A vegetarian café, arts and community centre, whole food workers' co-op, and a green activist office formed a 'green complex' as a physical assemblage encouraging "the most significant and uncontested green cultural codes" to self re-produce (Horton, 2006, p.137). A person's talk and practice, which is considered never static and often contested, engage on an on-going basis with the normalised cultural world of the green network. The on-going and elective involvements in such spaces were seen to discipline oneself 'into the range of appropriate green cultural performances' (Horton, 2006, p.134).

Cycling, like environmental citizenship, has a small population engaged with and performing it within the UK, yet cultural architecture associated to cycling includes 'cycle hubs' (Spurling and McMeekin, 2015), 'community bicycle workshops' (Batterbury and Vandermeersch, 2016) and 'bike cafes' (Buss and Lardy, 2015). Spurling and McMeekin (2015) identify how respective council policy and development attempts to alter cycling practices in the city through the construction of 'cycle hubs'. Such spaces often facilitate commuting by bike through the provision of safe bicycle storage, showering facilities and changing rooms in which to change out of cycling clothing, whilst bicycle maintenance spaces in the form of bike mechanics can easily work on bikes when the user is at work all day.

Utilising the maintenance service in an alternative manner, community bicycle workshops provide the opportunity to individuals themselves to "repair their bikes, source second hand and scavenged parts and learn maintenance skills" (Batterbury and Vandermeersch, 2016, p.191). This generally includes help and assistance from volunteers, but with an aim to contribute to the creation of a self-sufficient and autonomous bicycle citizen. These sites can be expanded upon to include opportunities where marginal(ised) identities can be 'comfortably' performed without the fear of suppression. Indeed, Horton (2006, p.146) identifies that these material architectures provide 'times, places and favourable material conditions' for both

supportive or sympathetic people who may not yet fully identify or commit to the practice to enact their concerns out further.

Buss and Lardy's (2015) review of bicycle cafes in Minneapolis, USA refers to three coffee and bike shops as a hybrid entity. Whilst primarily focusing on the creativity and flexibility of this business model in fitting two forms of shops together, they do also highlight the importance of elements associated to facilitating particular forms of cycling. The provision of a café, bicycle storage, cycle rental, do it-yourself repairs, bike accessories and clothing, as well as lockers and showers for commuters. Buss and Lardy identify different business models amongst the different bicycle cafes: one shop appeals to a wide range of customers offering basic road and urban touring bikes as well as moderately priced accessories due to its location in downtown Minneapolis; whilst another targets riders using off-road greenways for the commute by offering particular services (showers, lockers and bicycle storage) and also appealing to recreational riders through the rental of bicycles.

Searching beyond the materiality of the bicycles itself or the road infrastructure for cycling (or lack of), spaces such as cycle hubs, bicycle workshops and bicycle cafes provide cultural architecture that can influence and structure performances of cycling. For instance, the significance of the vegetarian café in Horton's example is that the user is unable to freely eat meat without the breaking of a cultural taboo. The space implicates that instead of it being an option among other established cultural norms, the café takes away the choice of an individual choosing to be green and instead these 'green architectures' structure the setting. Similarly, Batterbury and Vandermeersch (2016) note the general positivity of community bicycle workshops enhance citizen's intentions to cycle, but also acknowledge that for some members of the public who are new to the space, the underlying tone of influence can be 'off putting'. Whilst the workshop space provides the opportunity where education and the development of competence in maintaining a bicycle are developed, volunteers who assist are regularly 'cycling enthusiasts' with affiliations to activism whether that is anti-car notions or 'urban radicals' in which the bicycle is seen as an essential part of the city and maintaining its functioning critical. As a result, the community bicycle workshop can be seen to both produce and structure a particular practice of cycling to those who use the workshop, highlighting Wenger's comment of communities of practice giving

rise to both meaningfulness, but also holding practitioners hostage to that experience (Wenger, 1999).

The growth of such spaces is generally considered to be a result of "the signals sent by these places, and the reputations they develop" (Horton, 2006, p.136). The 'signals' maybe carried through the individuals who interact with these spaces; spreading them through their social network via word of mouth, social media and similar networks they are engaged with (Batterbury and Vandermeersch, 2016). Aldred and Jungnickel (2014) raise a question on the role advocacy plays in relation to cycling as mass culture but also how subcultural identities formed through marginalisation may themselves create a barrier to mass uptake. Taking this further then, it can be questioned how spaces *of* cycling contribute to cycling practices. Do these sites proliferate cycling performances accessible and accepted by the masses, or merely stabilise performances, values and identities that subsequently maintain a marginalised and contested practice?

The development of architecture relevant to cycling such as bicycle hubs, community workshops or cycle cafes may therefore assist in pushing the boundaries of bicycle culture. This is alluded to in Aldred and Jungnickel's (2014, p.85) case of Hackney's bicycle cafes as they were seen to encourage cycling and create an impression of an accepted form of cycling within the local culture. A reason for this is potentially due to the increasing range of places, times, and groups where practices can be enacted that are geographically local to an individual, providing a routinised performance of the practice (Horton, 2006).

3.4   Conclusion – Towards an Understanding of Cycling Cultures

This chapter has conveyed and discussed the practice of cycling in many different forms. First, cycling is varied, contested and involves the integration of numerous materials, meanings and competences, out of which, performances of cycling emerge. In summary, various elements say a lot about particular performances of cycling. The inclusion of particular clothing such as wearing helmets; particular behaviour such as cycling through a red light; or particular association to cycling in what it might say about the individual, can all contribute to the construction of a particularised performance (and therefore *variation*) of cycling.

Second, those who cycle are part of a wider and broader system. Social practice theory's 'system of practice' highlights that producers, providers, and the state itself all develop and circulate elements of which social practices are formulated from (Shove, 2010a). As such, ttransport planning and policy practices reflect a system of automobility, which remains dominant. In the competition for space and political legitimacy, cycling remains marginalised and outmoded.

Thirdly, cycling is advocated and campaigned not only by cycling groups but also but local businesses and organisations such as cycle workshops, cycle hubs and bike cafes. In regards to social practice theory, it was useful to consider 'communities of practice' throughout this section contribute to and popularise particular understandings and performances of cycling.

Given the widely perceived imperative of growing cycle use in the UK then, it is important to establish how sustainable methods of transport such as cycling are being structured, promoted and developed. Utilising the social practice theory approach opens up opportunity to consider how cycling practice is perceived by existing cycling cultures and what particular performances of cycling are promoted and advocated for. The research aims to utilise the understanding of materials, meanings and competences; systems of practice; and communities of practice to better understand and assess the subsequent trajectories these cultures enable or advocate for cycling.

[This page is intentionally left blank]

4   Research Strategy & Methodology

The following chapter outlines the strategy and methodology for the research project. The first section of the chapter begins by returning to the research aims and questions as presented in the introduction. Section 4.2 explores the qualitative rationale and conceptual framework of the research process. A social constructivist ontology structures the approach of the research process. A case study approach of Newcastle upon Tyne enables a geographic boundary to be applied to the research questions whilst the generation of the term 'social sites' helps explore various groups, businesses, organisations and institutions associated to and have an interest in cycling.

Section 4.3 outlines the data collection process. An ethnographic approach enabled close and frequent contact with social sites whilst semi-structured interviews and official documentation provided further depth and detail to initial observations. Each method helped triangulate the findings to provide greater confidence in presenting the research. Section 4.4 subsequently follows on from the data collection process in highlighting the data analysis approach. Referring back to Chapter 2, the use of practice theory provides a framework in which the research questions are explored and answered through the use of computer-assisted qualitative data analysis software, NVivo.

Section 4.5 details three particular reflections of the research process. The first reflects upon living in the community being researched and thus questions when I was and was not researching; the second reflects upon my previous experiences and performances of cycling, which may influence the research; and thirdly, the awareness of researcher bias affecting my judgement and analysis of the three social sites.

Sections 4.6 draws to attention two particular ethical considerations in preserving anonymity for participants and being truthful to participants about my research in regards to moments of covert ethnography, whilst Section 4.7 highlights a limitation of the research in remaining reflexive of my position as a researcher.

4.1 Research Aims, Questions and Objectives

This research aims to investigate and conceptualise in what ways 'social sites' of cycling in Newcastle contribute to cycling culture, particularly in regards to the trajectories of cycling practices. As outlined in the introduction, this research aim can be transformed into two research questions with an additional theoretical research question:

1. To assess how cycling social sites contribute to cycling practices and forms of cycling culture.
2. To formulate an understanding of how cycling social sites affect trajectories of cycling, with particular awareness to how cycling cultures may be born, grown, maintained and possibly decline.
3. To review the value and contribution of practice theory as an analytical framework in cycling research.

In order to successfully answer these research questions, the research chapters are split accordingly: Chapter 5 provides a broad introductory chapter to Newcastle's cycling culture; Chapters 6, 7, and 8 individually analyse Tynebikes, Newcastle Cycle Campaign, and The Cycle Hub with regards to the first research question; Chapter 9 review the three social sites collectively in regards to the second research question; whilst the third research question is reviewed in the conclusion chapter, Chapter 10.

4.2 Qualitative Rationale and Conceptual Framework

The research questions and objectives outlined signify the use of a qualitative research methodology. Qualitative methods help uncover often hidden meanings associated with social practices, in order to understand and interpret particular social phenomenon (Wellington and Szczerbinski, 2007; Bryman, 1993). The qualitative research approach focuses upon "how the complexities of the sociocultural world are experienced, interpreted, and understood in a particular context and at a particular point of time" (Bloomberg and Volpe, 2012, p.118). This is important in relation to this research in order to understand how the three social sites established themselves, the values they ascribe to cycling and how they interpret their influence and

contribution to the practice of cycling within the city of Newcastle. In this way the stories of those engaged with cycling in Newcastle can be uncovered.

My role as the researcher and my ontological positioning cannot be divorced from the approach I have identified in relation to this research. Guba and Lincoln (1994, p.105) argue that:

> "Questions of method are secondary to question of paradigm, which we define as the basic belief system or worldview that guides the investigator, not only in choices of method but in ontologically and epistemologically fundamental ways."

My ontological assumptions are assumed to filter throughout the research, feeding into the ways research questions are asked and how the research itself is carried out (Bryman, 2016). As Mason argues "people's knowledge, views, understandings, interpretations, experiences, and interactions are meaningful properties of the social reality which your research questions are designed to explore" (2002, p.63). As a result, the research adheres to a social constructivist paradigm, which posits that realities are multiple, intangible constructions in which social actors are continually altering and creating social phenomena and their meanings through social interaction (Bryman, 2016; Guba and Lincoln, 1994). These realities are local and specific in nature and are dependent for their form and content on the individual persons (or in this case social sites) holding the constructions (Guba and Lincoln, 1994). In reaction to this, the researcher should investigate the ways social reality is being constructed by the relevant social actors (and social sites), instead of assuming that it is something that is externally constraining them (Bryman, 2016).

These constructions are not aspiring to be 'true' in an absolute sense, but rather they are informed and sophisticated constructions which are alterable along with their associated realities (Guba and Lincoln, 1994). In relation to my role as a researcher, it should also be considered that rather than providing a definitive account on the social world, it is assumed that my account of the social interactions in relation to the practice of cycling within Newcastle is rather another version of social reality (Bryman, 2016) but one given the exposition of the data in the following chapters would be broadly in line with others' interpretations.

4.2.1 Case Study Approach

This study sought to examine a singular city in order to enable and elicit significant detail; therefore a case study approach was selected as it enabled this "fine-grain detail of the social processes in their appropriate context" (Cassell and Symon, 1994, p.208). Generally a case study approach relates to a location, such as a community or organisation, identifying the boundary in which intensive examination of the setting takes places (Seale, 2012). It can therefore act more as a strategy than a method, managing boundaries of what is and is not to be studied (Stake, 1994). An in depth single case study facilitates the necessary depth in relation to contemporary happenings as well as historical reflections with regards to cycling as a practice.

The case study was not selected to provide a 'statistical generalisation' (Yin, 2014). Whilst this implies the case study approach lacks external validity, it is generally not the aim of a case study approach to claim so (Seale, 2012). It is not the aim of the research to suggest that the findings might be generalised in relation to other cities. Rather, the research aims to cast further empirical light on the topic of cycling cultures and their variations and complexities within different cities.

By selecting Newcastle, the research examines cycling culture in a low context with 2.8% of the Newcastle population cycling to work in 2011, which is slightly lower than the national average for England at 3.0% (Office for National Statistics, 2016). Selecting a case study such as this will demonstrate how cycling cultures have established themselves in a somewhat unfavourable national and local context and to identify the cycling cultures that potentially go unnoticed due to the cities 'ordinariness' in relation to cycling.

This shares parallels with what Seale would consider as a 'representative' or 'typical case', in which the case isn't necessarily extreme or unusual in some way, but reflects a broader category of cases (Seale, 2012). As a result, this study takes an alternative approach in comparison to previous research. Rachel Aldred's research project *'Cycling Cultures'* (Aldred, 2010, 2012a, 2012b, 2012c; Aldred and Jungnickel, 2012, 2013, 2014; Jungnickel and Aldred, 2014) examined experiences of cycling in four relatively high-cycling English urban areas in order to understand how cycling had become 'normalised' within what is an unfavourable national context. Whereas, it can

be generally argued that when low-cycling contexts are used in cycling research, projects commonly alter the focus and look for the potential barriers as to why cycling does *not* occur. The *'Understanding Walking and Cycling'* (UWAC) project (Pooley et al., 2013) echoes this, with the four key sites selected due to their broad representativeness of a range of communities throughout England. The UWAC project focus was upon understanding the reluctance and motivations of individuals in engaging with cycling (and walking) for everyday travel within these urban settings. The general widening of focusing on potential barriers to those who do not cycle neglects the potentiality of identifying how cycling cultures may already exist in many cities. A cycling culture may not be reliant on the overall cycle rate of the city and to select a city that may not be considerably above the national average would provide focus upon cycling cultures that have yet to be considered.

4.2.2 Cycling Social Sites

Most commonly cycling research identifies the user as a key entry point of research in order to formulate a consensus as to why (s)he may or may not cycle. Chapter 3.1 illustrates the variety of cycling performances. Research has focused not only on the cyclist but also the non-cyclist in order to conceptualise how the practice of cycling is perceived. This generally involves the collection of large sample sizes from an array of research methods including interviews, questionnaires, focus groups, as well as ethnographic accompanied rides and video recordings. The research here takes an alternative approach focusing on the 'stakeholders' of three 'social sites' associated with cycling: Tynebikes, Newcastle Cycling Campaign, and The Cycle Hub.

Here, the term 'stakeholder' is used to define key members and important individuals associated to various social sites within Newcastle's local cycling culture. Whilst cycling 'social sites' can broadly include: pressure/advocacy groups, cycle workshops, cycle hubs, cycle shops, cycle clubs (e.g. racing clubs, leisure clubs or alternative groups such as 'fixie' bike groups) etc. that essentially contribute to cycling practice within a city. For the benefit of this research three particular social sites have been selected based on their contribution to cycling in Newcastle. Figure 4-1 visually illustrates the various terminology mentioned throughout the thesis and its subsequent relationship to other terms.
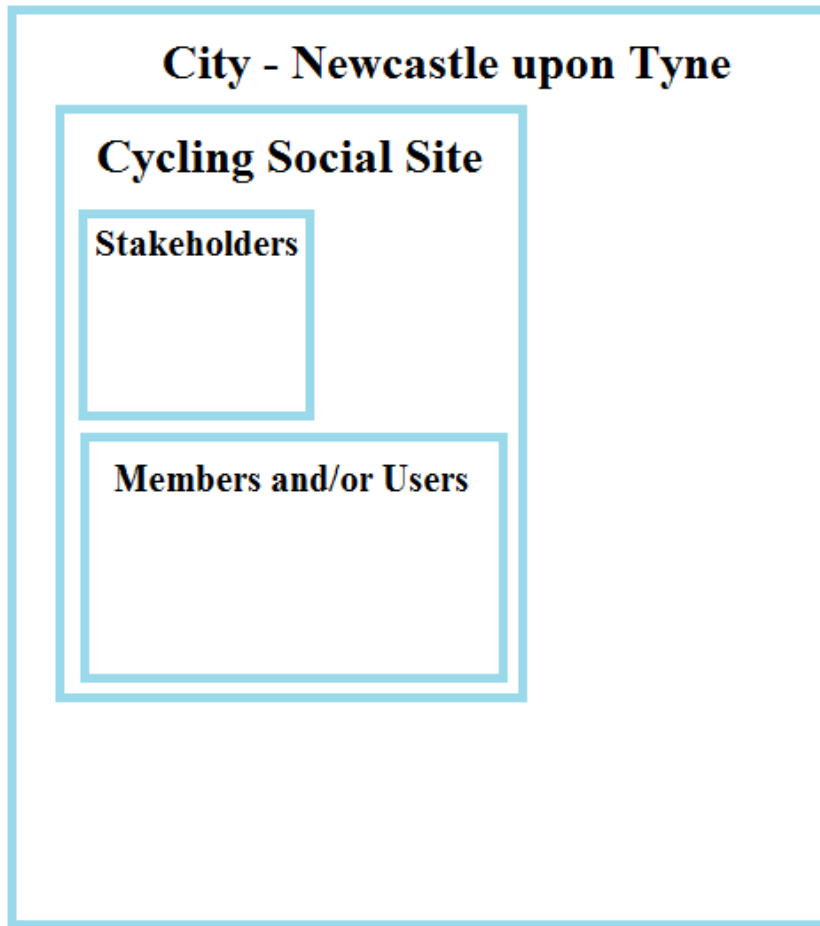
Figure 4-1 Cycling Social Sites Conceptualisation

The relevance of social sites and their relevant stakeholders is identified in other research (see Aldred and Jungnickel, 2014). This research compliments Aldred and Jungnickel's to widen cycling research beyond the focus of the physical network and its users. When selecting multiple cases, it is usually in regards to a number of different cities. Both Aldred's '*Cycling Cultures*' and Pooley et al.'s. '*Understanding Walking and Cycling*', utilised four case city studies throughout their research in order to compare and contrast. Unlike Aldred and Pooley et al., the use of multiple case studies is not necessary for this research considering the research questions. Rather, it is of importance to identify multiple social sites within Newcastle that contribute to the development of cycling culture. This will allow an in-depth and critical analysis of one particular case and the various social sites that contribute or have contributed to the production of a cycling culture.

The hypothesis of the study is to investigate whether sites of cycling contribute to a cycling culture within Newcastle that affects the performance of cycling as a social practice. The three sites were identified in the early stages of the research and are important in influencing cycling practice in Newcastle. Selecting Tynebikes, The Newcastle Cycling Campaign, and The Cycle Hub provides both historical and contemporary reflections of cycling practices. In relation to the theoretical framework of practice theory, practices can evolve, change and alter as time progresses, therefore the ability to measure different conceptualisations of cycling practices through time helps to also establish potential alterations of cycling performances and trajectories. As a result, through the selection of these three social sites, I highlight cycling in Newcastle throughout the years of 1982-2000 and 2010-2017.

Whilst two social sites are primarily cycling campaigns (Tynebikes and Newcastle Cycling Campaign), the third social site, The Cycle Hub, provides an example of a more recent aspect of cycling culture in the form of cycle hubs. The focus on cycle hubs in research has been rather scarce (see Buss and Lardy 2015; Spurling and McMeekin, 2015); therefore researching The Cycle Hub begins to shed further light on an underrepresented social site of cycling. Again, utilising different social sites such as this provides further analysis into potential variances of what cycling practices are and thus alternative variants of cycling being advocated for in Newcastle. This focus is also supplemented by a wider engagement with Newcastle's cycling culture as outlined in Chapter 5. This provides a valuable context for the forthcoming empirical chapters, introducing broader stakeholders, social sites, and documents that are not necessarily representative of the three social sites selected but provides a wider overview of cycling in Newcastle.

4.3   Data Collection Methods

Having considered the justification for the case study rationale and the identification of various cycling social sites, the use of an ethnographic approach enabled the ability to maintain close and frequent contact with events, engagements, and opportunities relating to cycling. A participant observation approach provided a familiarisation with the cycling population and continual interaction and identification of key cycling stakeholders. Supplementary methods of semi-structured interviews and the use of

official documentation provided further depth and opportunities of data collection derived from initial observations. The contribution of these methods of data collection contributed to a process of 'methodological triangulation' whereby a process of crosschecking findings from the various methods enabled a greater confidence in the presentation of the research findings.

4.3.1   The Ethnographic Approach

'Ethnography' is potentially a misleading label due to its lack of precise definition (Bryman, 2016; Hammersley and Atkinson, 2007; Hammersley, 1998). Rooted within social and cultural anthropology and later utilised by sociologists in the early twentieth century (Hammersley, 1998), ethnography has traditionally been used in order to conceptualise society, whether that was in the writings of travellers of anthropology or the pre-occupation of sociologists engaging in the study of their society or societies surrounding them. Bryman draws to attention the difficulty in distinguishing between the definitions of ethnography and participant observation in that both refer to the researcher immersing themselves into a group for an extended period of time observing, listening and asking questions (2016, pp.423-424). As a result these two terms are somewhat loosely used together when exploring the ethnographic approach to this research study.

Beginning with an interest in some particular part of social life, ethnography seeks to investigate the views of those who experience it, how they regard others in the same situation and how they see themselves (Hammersley and Atkinson, 2007). Not far removed from how we make sense of our surroundings in daily life, ethnography utilises a more deliberate systematic approach that makes sense of the social world we are involved in, in order to produce research knowledge (Hammersley and Atkinson, 2007). Spinney (2009, 2007) utilises ethnographic methods within cycling research as a primary method for this reason. His focus upon the experiential and sensory side assists him with understanding personal experiences and interprets practices of cultural groups that may otherwise be untranslatable. The researcher will often enter the field with little structure to the research process due to the importance of immersing themselves, learning the 'rules, norms, boundaries, and behaviours' through the establishment of relationships with other members in the field (Schensul

and LeCompte, 1999). This is evident in other cycling research where non-participant and participant observations were respectively used to gather both field notes on particular behaviours and practices but also to gain further access to events and individuals of particular cultural groups (see Aldred and Jungnickel, 2012; Horton, 2006). It will often be unclear where, within the setting, or who, observation should begin. Indeed, throughout the research process, the method of data collection altered and changed in reaction to the reflexivity of myself in the field.

Participant Observation

The method of social investigation most commonly utilised when conducting ethnographic field research is 'participant observation'. The opportunity of engaging with the field in order to both participate and observe is structured through numerous techniques of 'observation by conversations, informal/unstructured interviews, formal interviews, surveys and collecting personal documents (written, oral and photographic evidence)' (Burgess, 1991, p.2). Gans (1991, p.56-57) outlines that the participant observation role is predicated on the researcher taking a formal participatory role in the social community being studied but without emotional involvement on the researcher's behalf. The surrender of personal interest is necessary in order to enable the opportunity to freely observe, resultantly becoming a process of registering, interpreting and recording (*ibid*). The role then, puts the participant observer as close to real data or sources of real data as possible and enables the discovery of new facts, generation of new ideas through the observation and interaction with those who are being observed (*ibid*).

A paradox exists however in which observation raises issues in attempting to conceptualize the required level of involvement necessary when engaging with the field. Over participation on the researchers behalf may result in them becoming too involved and over sympathetic with the group that observation from a social scientist standpoint is lost or becomes impossible. Whereas keeping your distance and observing may result in the researcher becoming too aloof and fail to understand the complexity of the human situation within the field of observation (Agar, 1996; Burgess, 1991; Wolcott, 1999). Whilst this role of participant observer or 'detached involvement' is generally identified in qualitative research, Wolcott (1999, p.48)

introduces a role of 'non-participant participant observation'. By this he acknowledges the difficulty whether research and its researchers should interact in the field or whether they are actually allowed. This identifies that actual ethnographic research represents elements of these two extremes, creating a continuum where the ethnographer adapts their approach to suit the situation at hand (Agar, 1996).

Wolcott's (1999) non-participant participant observer makes no effort in hiding what they are doing or deny their presence as an influential factor within the field. But at the same time they don't go as far as a *participant* has in taking an active or interactive role. This identifies a key element of reflexivity on the researcher's behalf where it is necessary to become self-critical and self-aware in social situations (Burgess, 1991). Yet it must be acknowledged that whilst this was generally the role I took as a researcher, this is not to say that moments of observation would shift, whereby participation on some level was unavoidable based on being able to gain access to further settings, which required such engagement (for example, see Chapter 4.5.3).

Entering the Field of Cycling

Researchers themselves are the primary instruments of social investigation (Burgess, 1991; Schensul and LeCompte, 1999). Entering the field of cycling, represented the starting point of ethnographic research, with the motive of establishing relationships important to future research; identification of various groups within the wider cycling population both current and historical; as well as providing an initial grasp of organisational boundaries and prioritisations (both physical and social) (Schensul and LeCompte, 1999). Schensul and LeCompte (1999) comment that two aspects, time and money generally limit the research period. Therefore, in order to maximize the opportunity of building strong and appropriate relationships within the cycling field, I immersed myself early during November 2014, whilst the conclusion to the data collection was during September 2017.

Field notes were collected at the time of the social events held by particular cycling social sites including cycling oriented events, committee meetings, Annual General Meetings, or general attendance and use of facilities. Furthermore, local council

meetings regarding cycling social events (both local and national) were also attended. In total 70 events and/or sessions were attended (see Appendix 1). Not only did these events provide observational field notes and monitor those involved, they also enabled a snowball effect of providing further access and awareness to future events. Events or sessions therefore generally associated to cycling were attended on the basis of not wanting to miss a potentially important contact or overlook a particular group of individuals. O'Reilly's (2005, p.97) comment succinctly defines my research experience in that:

> "A participant observer needs to observe details in different settings, at different times. It may be that you have to be at every gathering and every event, and be the last to leave and the first to arrive, to be unobtrusive and yet ask questions, to join in and yet remain an outsider."

Research observation and engagement was primarily conducted in spaces where any member of the public or member of a cycling social site could attend. There were social settings however in which access was difficult. In relation to Newcastle Cycling Campaign, I wished to observe their approach in spaces where they communicated with Newcastle City Council in order to conceptualise the key discourses they would use. These however generally happened behind closed doors. For instance the 'Blue House Roundabout Working Group' was an opportunity to observe such engagement however this was restricted to representative groups in the local area generally referring to local residents associations as well as environmental groups. As a result, in instances like this I was able to negotiate access to this closed, non-public setting through conversation with the City Council due to the rapport I had already established. Nonetheless there were still settings I was unable to access, which would have been valuable to observe, most notably the Technical Advisory Group meetings that involved again, Newcastle Cycling Campaign and Newcastle City Council as well as other cycling social sites.

Overt Ethnography

> "The researcher who hides his research role can enter more easily than the researcher who describes himself as such, and begs admittance on the

basis of persuading people that scientific research is useful and desirable."
(Gans, 1991, p.57)

In order to identify potential key informants whether they are affiliated or not to a particular population group at a distance and 'unobtrusively' was generally difficult without informing them of who I was as a researcher. There was not so much scrutiny but more of an interest of who I was and what I was doing as a 'Newcastle University student'. I attempted to provide enough information that would be informative to individuals who asked. Therefore being a university student studying cycling cultures in Newcastle was consciously used so that individuals could place myself within the current context of their cycling environment. Reflecting upon the role of myself in the research process, it is evident that I used the identity of the 'university student' more so in order to establish a perception of my role. I rarely identified that I was engaged in a PhD thesis; rather I mentioned that I was doing research. Agar (1996, p.110) retains a somewhat pessimistic approach of controlling the perception of your role in fieldwork. My approach attempted to bait this perception with the introduction I gave and therefore constructs a 'front' or particular role within the cycling network (Bryman, 2016). If I was to be type casted or identified as something particular in the first stages of research then it was hoped to be perceived as a 'naïve' student wanting to learn everything about the situation. This was not necessarily used in order to trick those involved, it was rather to act as reassurance mechanism in the hope that they would not be suspicious of my intentions and consequently hold back information. The lack of complexity relating to my role enabled me to be consistent in my actions and not create any potential worries or fears with those I was engaging with.

During this period of familiarization within the field and building of rapport, there would no doubt be a level of questioning of my motives and intentions and therefore limited the opportunity to fully observe the field without my presence being felt. None the less, this role enabled the orientation of the environment, providing a backdrop to the cycling population that encourages a more systematic enquiry (Schensul and LeCompte, 1999). When engaging with the cycling field it was therefore important to identify the approach of engagement.

As already acknowledged, the role of the researcher is not someone detached from the research field, objective in their observations. Rather, as a research instrument, the researcher will influence the course of the research process in countless ways. But it must also be acknowledged that the ethnographer cannot be in many places at once within the research field observing, taking field notes and describing what they see. This impossibility of an "all-seeing ethnographic and theoretical eye" (Law, 1994, p.74) alludes to the conscious decisions the ethnographer has to make on who to observe, where, at what point in time and how to record the data.

Writing field notes including events, behaviour, conversations overheard, and casual interviews are generally considered as the primary materials of participant observation (Dewalt et al., 1998). But Dewalt et al. (1998) emphasise that the act of writing is critical in that observations themselves are not data unless they have been recorded in some form, enabling analysis. Observational notes require 'concrete descriptions of social processes and their contexts', in which various properties and features are captured (Walsh, 2012, p.255). This period of observation was therefore less structured and less selective in what was recorded. Maintaining 'generative questions' according to Strauss (1987, p.17) assists with the observation process with these questions generally originating in the early phases of the study, serving as a guide as well as a challenge to the researcher to study the identified phenomenon. As a result, these questions assisted somewhat with the embryonic stages of this research providing a level of structure with the common question of 'how do cycling social sites contribute to cycling culture and practice?' generally being asked in order to generate observations and notes. With this in mind, I was able to approach early events and sessions with more focus in regards to the research, yet still enable a broad observational approach.

During this period of observation, field notes largely took on the recording of behaviour and monitoring experience from distance. This is in comparison to 'experience near' which would have involved communicating with and understanding an individual's ability to provide an account of a situation (Agar, 1996). As a result, observations of interest were "places, people, social interaction, clothing, language,

and other aspects of the community setting" (Schensul and LeCompte, 1999, p.87). Note taking contributed to an account which reflected a 'stream of consciousness' in many cases, whereby questions and connections were continually asked and created throughout the development of notes (Cook, 2005, p.181). Agar (1996) criticises the use of field notes if their use is not fully understood or outlined. Failure to do so results in an attempt to 'vacuum' everything possible, thus limiting the ability to pay sufficient attention to observe the proceedings. Agar (1996) may consider this amount of awareness when observing as too broad but it was felt necessary to do so to begin with. Indeed as time progressed observations that were common were generally referred to in notes but not necessarily explained at length due to the recurring nature of it and previous description. As a result field notes began to generate a sense of focus on particular topics, which would inform the next step of the ethnographic study of the semi-structured interviews.

The data collection in this form attempted to remain descriptive and non-interpretational for the fear of wrongly assuming something or 'glossing' over a topic due to pre-conceived assumptions that the researcher holds (see Chapter 4.5.2). However, this fundamentally cannot be removed. Field notes are not only data but they are also analysis. As Dewalt et al. (1998, p.271) identify, field notes are a record of events, behaviour, conversations and observations but the record is constructed from the perspective of the researcher. This does not conceive that field notes were ever 'objective' in nature but it does reveal a fear I had as researcher of assuming too much in the field notes and drawing on my previous knowledge, experiences and associations to cycling. The researcher may already be enculturated in some form and being consciously being aware of this may help; but the process of participant observation only seeks to build upon this with a tacit understanding being developed (Dewalt et al., 1998). But as Clifford (1990) observes 'pure inscription' is not attainable, in that producing pure recordings in field notes cannot be sustained as no matter what, the production of field notes through participant observation is always a construction of the ethnographer. This then always assumes a level of analysis on the researcher's part that distances the method from objective observation. It is the recording of notes which allows the opportunity to read and re-read them searching for topics of discussion that refer to things that are not only not understood or

incomplete in their explanation but also reveal moments of enculturation that must be acknowledged and used as further topics of discussion.

In regards to 'when' to write down observations much of this happened during the observations themselves. Walsh (2012) identifies that the researcher should develop strategies in relation to the setting under study. Whilst it was not uncommon for individuals to take notes during the various events attended, my observational approach meant that my note taking was still somewhat more excessive than others. However with an overt approach to the research, it was generally assumed that individuals were aware of my note taking. In certain circumstance such as the Newcastle Cycling Campaign's Cycle Safari Rides, the 10th anniversary celebration of Recyke Y'Bike, and more social gatherings after particular events, note taking reverted to a reflective approach in which notes were typed up after the event had been observed. It was in settings such as this that the image of myself with pen and paper noting interesting moments felt out of place. A risk with this is the deterioration in quality of the field notes due to the problem of memory recall (Walsh, 2012). Once I had left the events, I regularly began to make keynotes on my mobile phone before expanding upon these later when I was able to provide fuller details on the topics of discussion.

4.3.2   Semi-Structured Interviews

The selection to use a semi-structured interview approach over that of a structured interview relates to the importance of gaining genuine access to worldviews, perceptions, and opinions of those being interviewed (Bryman, 2016). There are numerous variations of the 'interview' approach, ranging from questionnaires in writing; oral interviews constricted to predetermined questions of the interview schedule through to the more freely structured semi-structured interview; and exploratory interviews (Whyte, 1991). 'A conversational and fluid form', semi-structured interviews enable a dialogue to be developed rather than an interrogation, leading to a richer and more detailed insight into their experiences. As Valentine (2005, p.111) states:

> "The aim of an interview is *not* to be representative (a common but mistaken criticism of this technique) but to understand how individual

people experience and make sense of their own lives. The emphasis is on considering the meanings people attribute to their lives and the processes which operate in particular social contexts."

The fact that prior to the interviews, the research investigation had narrowed the focus of the research topic down through the literature review and the process of observations means that more specific issues relating to this research could be addressed. None the less, the semi-structured interview approach, also generally noted as 'in-depth interviews' or as 'qualitative interviews', were still 'non-directive' in nature which required more than a 'yes' or 'no' response, encouraging individuals to explain and answer questions in depth (Byrne, 2012). The role of the researcher here is not that of an interrogator but rather a one-down position in which the stakeholders selected can "criticise a question, correct it, point out that it is sensitive, or answer in any way they want to" (Agar, 1996, p.140). This approach may be considered as an amoeba with the appearance of the interview being a natural and interesting conversation (Burgess, 1991). Burgess's (1984, p.102) term 'conversation with a purpose' provides an apt conceptualisation. As a result the conversations encouraged a level of reflection that may have strayed towards moments of 'rambling' on the interviewees behalf, taking conversations off course and on tangents. Yet this refers back to what Bryman (2016) argues as an important aspect of gaining access to worldviews, perceptions, and opinions.

This unstructured and unfocused nature of this method may therefore be perceived as a method that collects questionable data regarding its usability. It is the role of a good ethnographer that does extensive preparation prior to such data collection that has the opportunity to acknowledge these criticisms and rectify them. The strength of the method is that it allows the manipulation of the approach, with the interviewer guiding and bending the conversation through focused or loose questions based on prior knowledge to the subject to suit the service of the research interest (Burgess, 1991). Whilst I had general questions that were common throughout all my interviews, I also had more specific questions as a result of prior observations and engagements. This may seem to contradict the concept of exploratory interviewing due to its emphasis upon placing restrictions on individuals through the questions posed, inhibiting to freely explain their own perspective of things. Yet, it was

understood that conversations may depart from the line of question; some questions may be more relevant than others; or that the order of conducting those questions would alter for each interview. It is this *flexibility* that a semi-structured interview provides as it is what the interviewee perceives that is important. As Bryman (2016, p.468) maintains:

> "The emphasis must be on how the interviewee frames and understands issues and events-that is, what the interviewee views as important in explaining and understanding events, patterns, and forms of behaviour."

Exploring the cycling social sites required discussing with individuals who had different understandings and perceptions of cycling and different methods of engagement in benefitting cycling practices in comparison to other stakeholders and the wider socio-political environment. With the introductions to stakeholders throughout the cycling field previously established during the process of participant observation, it was of importance to use semi-structured interviews to discover new information and expand upon existing understandings, thus providing the opportunity to inform and shape the on-going research process (Schensul and LeCompte, 1999). This step relied upon the identification of particular sites within the field of cycling in Newcastle and their stakeholders in order to gain an in-depth understanding of their perspectives.

Sequential Purposive Sampling

Sampling is generally associated with survey research, but any type of social investigation will generally have a level of sampling from the basic unit of study due to the size of population or social setting making it difficult for everyone or everything to be observed (Burgess, 1991). As the research study doesn't fall into a positivist framework, utilising a probability sample to validate results is not necessary. Rather, the three social sites (the 'samples') have been selected as a result of a conceptually or theoretically informed process (Schensul and LeCompte, 1999, p.232). The research aims determine that the research requires 'informed informants' and not just 'responsive respondents' (Bernard, 2006). These informants are not to be seen as selection at random but rather a judgemental sample in respect to their

specialised knowledge on the particular topics established (Agar, 1996). Therefore, individuals were chosen on purpose rather than at random due to their cultural expertise. As Bryman (2016, p.408) comments, this selection of individuals for interviews relates to a purposive sampling technique in which those selected are relevant to the research question posed. Individuals associated to the various social sites identified within Newcastle's cycling field, whether they be associated to a business, organisation, campaign or other, were selected due to their knowledge and connection to either one of the three major social sites or in relation to the wider cycling field. In addition to this, due to the use of an observational method of data collection the sampling was also rather sequential in nature, whereby new individuals and indeed new social sites were identified throughout the course of the research process. As a result, this 'sequential purposive sampling' approach enabled individuals to be selected 'by virtue of their relevance to the research questions' with the sample gradually being added to as the investigation evolved (Bryman, 2016, p.410).

The choice of social sites within the cycling population represents a "trade-off between studying cases in depth or in breadth" (Hammersley, 1998, p.11). As it is observed here, like many ethnographic studies, the latter is sacrificed for the former in order to make theoretical inferences that may otherwise be impossible. This is not to say however that the research study lacks some form of breadth. By selecting three social sites, there is still the opportunity for comparison and the opportunity to provide different perspectives concerning the same issue (Burgess, 1991). The same research questions are posed to the social sites in a consistent setting of Newcastle (albeit over different timeframes) but provide the opportunity to involve comparable analysis to confirm patterns, establish variability's and establish a field of cycling within the social sites under study (Schensul and LeCompte, 1999).

The interviews were based on a specific criterion of identifying a number of key stakeholders per case who were able to provide "orienting information about the context and history of the study and the study site" (Schensul and LeCompte, 1999, p.121). Roles included Chair, Secretary, General Manager, President or otherwise but the fact remained that they were key stakeholders of these social sites, either currently, historically or both. Due to the size of the cycling network within

Newcastle (see Chapter 4.6.1) it meant that many individuals knew of one another and therefore would mention or comment on them when discussing particular topics in the interview. As a result, some interviewees were identified on the recommendations of other research participants, relating to a snowballing technique whereby those research participants interviewed identified, through their experience and knowledge of the cycling field, other individuals I as a researcher had been unaware of or not yet encountered. Comments in regard to this included:

> "I mean it would also be equally interesting to speak to people from [social site]." (Newcastle Cycling Campaign, S4)

> "If I think of anyone else, trying to think, have you ever come across [name]… I'm still in regular contact with [name], we do some small projects together, so if you want to speak to him I can sort that out." (Sustrans, S1)

> "I mean by all means I'm sure [name] would be happy to speak to you as well." (Newcastle Cycling Campaign, S4)

> "Have you spoken to [name], because [name] was you know a councillor." (Tynebikes, S1)

Therefore, whilst prior observations identified key stakeholders to approach, the cycling network itself provided further stakeholders through the connections between significant individuals (Seale, 2012). Whilst Seale (2012, p.145) comments that a particular limitation of utilising snowball sampling includes a bias towards a certain group of individuals it was an unexpected consequence of the interviews. The approach manifested after a number of initial contact points had already been identified (Valentine, 2005). Therefore, it should be considered that these recommendations by others served as a method of confirming that those who I already had identified or spoken to already, were relevant and representative individuals. This therefore not only added to key stakeholders within the cycling network of Newcastle, but it also verified and confirmed my selection of stakeholders.

In total 29 interviews were conducted with 23 separate stakeholders (some stakeholders were interviewed twice) throughout the research process with research

participants relating to both the social sites and the wider cycling field. There were another 9 individuals identified that I wished to speak to and interview yet I was unable to do so. In some cases other individuals were identified from the same social site or it was decided that I had already spoken to a large number of stakeholders associated to a particular social site and decided against interviewing any further. Throughout the research, I refer to research participants anonymously, using their association to the particular social site they themselves identify with. Stakeholders are numbered, acknowledging that a number of stakeholders were interviewed from a social site. For example 'The Cycle Hub, S3' refers to a stakeholder from The Cycle Hub, whilst also acknowledging there has been at least three stakeholders at The Hub interviewed. It is also raised here that a number of informal discussions took place with 'users' of a social site (primarily The Cycle Hub). These quotes and comments are marked 'The Cycle Hub, U1' to signify a user rather than a stakeholder.

It was preferred to conduct individual face-to-face interviews due to the synchronous communication in time and place which allowed social cues such as voice, intonation and body language to be instantly identified when conducting the interview (Opdenakker, 2006). Generally held in social areas such as cafes, a library, pub or civic centre, on one occasion the interview included two interviewees of the same social site after the stakeholder thought it useful to bring along a fellow member to provide further perspective. On three occasions interviews involved telephoning or using Skype due to the difficulty of meeting, either as a result of geographical or timing constraints. Although telephone interviews still elicited a valuable discussion with the participants it was evident that the inability to observe body language and react upon this may have reduced further exploration of particular discussion topics (Bryman, 2016). Furthermore with the Skype chat, the poor Internet quality meant that although video was possible, both that and the voice line would now and again cut out or freeze, resulting in transcriptions being incomplete (Bryman, 2016). Therefore, it was favourable to conduct interviews in a face-to-face format unless circumstances prevented so.

12 of 35 interviews occurred on the Newcastle University campus, predominantly in cafes on campus. But the majority were held off campus at places of the research participant's choice. As a result, a number of interviews (7 of 35 interviews) were

conducted at the individual's place of work or associated place of work, generally for the ease of the research participant. But this was also beneficial for the research study as these were cycling social sites and therefore the ability to discuss the place whilst inhabiting and observing it enabled further context (Valentine, 2005). Generally, preparation involved the establishment of a place that is of comfort to the interviewee and introduction of the project. This was confirmed through the provision of the 'information sheet' (Appendix 2), which ensured confidentiality and protection of their privacy.

All interviews were recorded via dictaphone with the resulting audio format transcribed, predominantly in full with a number only transcribed in some part but only after listening back to the interview and identifying large sections which were non-relational to the research topic (Bryman, 2016). The use of a dictaphone was considered to provide the most detail in comparison to taking notes during the interview and writing a report later or making notes once the interview had concluded and then writing it up (Whyte, 1991). Interviews lasted from as short as 25 minutes to as long as 2 hours and 30 minutes. Largely however they lasted between 40 minutes to 1 hour and 20 minutes. Whilst transcription is a time consuming task and the presence of the dictaphone created a sense of formalness, these were outweighed by the ability to record the whole interview. Furthermore, this approach was not prone to losing attention when having to concentrate on making notes or generating extended awkward pauses for the interviewee whilst attempting to scribble down comments and then attempting to reengage with the conversation (Whyte, 1991). If a dictaphone was not to be used for the fear of limiting the response of the individual through the sense of the meeting being too 'formal' or the anxiety of 'everything being on tape', then the lack of one creates an interview that is just as anxious with lapses of concentration and pauses on the researcher's behalf whilst frantically attempting to record anything of interest. Thus, using a dictaphone enables the researcher to focus upon the interviewee, register any non-verbal cues and be able to pick up productive leads given by the informant.

Interviews generally started with a discussion around the individuals own cycling performances, the study instead emphasised the strategic motivations of individuals on what could be argued as cycling practice-as-entity, in identifying wider strategic

goals of these social sites in contributing and enabling other individuals to utilise what they have developed in their own performances. However, as mentioned interviews generally started with discussions of the participants own cycling practice and indeed in relation to The Cycle Hub, further interviews with cycle users discussed their own cycling performances to provide the research more insight into why The Hub was being used. As Hitchings (2012, p.61) argues "people can often talk in quite revealing ways about actions they may usually take as a matter of course" and therefore the use of interviews in regards to the discussion of practice as performance was still suitable to utilise.

4.3.3   Documents as Sources of Data

Documents as sources of data refer to rather a large and heterogeneous group of sources of data including 'letters, diaries, autobiographies, newspapers, magazines, websites, blogs, and photographs' (Bryman, 2016, p.546). In contrast to the other data collection methods mentioned this data collection method is rather unobtrusive in nature. It is somewhat 'non-reactive', as they have not been created as a result of the research process. Importantly, these documents have either been created or utilised by the social sites, thus ensuring credibility in their use when utilising them throughout the empirical chapters. Two particular uses of this data collection was virtual documentation produced by the social sites as well as official documentation.

Virtual documents were useful throughout the research process, particularly the use of websites. This somewhat crosses over with official documentation albeit access to documents was via the Internet. In the case of Newcastle Cycling Campaign, their own website was a key source which helped both generate questions for interviews but also assisted in the analysis, in helping analyse the campaigns identity and advocacy practice within Newcastle. Websites, generally of those related to the social sites, also frequently held further official documentation and therefore acted as a data generation tool. The use of blogs, emails, social networking sites (Facebook) also provided further sources of data yet not to the extent of the campaigns own website.

'Official documentation' refers to documents published and intended for the public domain such as annual reports, mission statements, press releases, regular newsletters or advertisement flyers (Bryman, 2016). It also refers to other documents that may (or

may not) be available within the public domain; these include minutes of meetings, organisational memos, and both internal and external correspondence (*ibid*). Some material was easily available such as flyers published by The Cycle Hub due to the nature of the documentation being an advertisement, but others such as annual reports by the Newcastle Cycle Campaign required attendance to their annual general meeting or was available further on the Internet.

Other documentation was not available within the public domain and was unknown until observations and interviews took place. One particular individual identified a wealth of archival material relating to Tynebikes 'when moving house'. The two large boxes, which contained a collection of newsletters, flyers, newspaper clippings, internal and external correspondences, memos, and notes, relate to Hill's (1993) definition of archival data being storehouses of rare and unique materials of historical importance. Yet, it must be acknowledged that the archival material retained by the individual relating to Tynebikes between the years of 1982-2001 should be considered to be a 'raw batch of occurrences', capturing traces of discussions and topics at the time. This shouldn't necessarily delegitimise the data; on the contrary, it draws attention to the process of 'sedimentation' whereby the material retained and collected throughout the years relates to what was perceived as important documents. This provided a further dimension to Tynebikes as it provided explanatory depth and insight over an approximate twenty-year period (1982-2001) in which relevant interviews with other members failed to recall (Seale, 2012). A criticism of interviewing individuals in regards to historical aspects is the potential memory lapses and distortions of events (Bryman, 2016, p.488). This was a particular issue in relation to Tynebikes with the individuals finding it difficult to recall the order of events relating to their issues and plans due to this occurring predominantly in the 1980s and 1990s. One individual commented, "It's quite difficult to remember exactly what was happening and when, so hopefully the papers if I can find them will help" (Tynebikes, S2). As they note, the official documentation offered a vast explanatory depth and description to some general themes originally identified within the interviews themselves, thus supplementing the interviewing weakness with the strength of historical documentation through a process of triangulation (Seale, 2012).

The stakeholder who was a key committee member throughout the years of Tynebikes retained the documents and whilst there was a vague structure to the filing of the documents it still resulted in a personal collection with a vast range of documentary sources. Whilst the multitude of documents meant there was a vast amount of information, it provided a clearer and shaper perception with the past through the various insights, stories and issues deposited within them (Prescott, 2008). Craven (2008) contends that archives generally hold too many records for the researcher, whilst Bryman (2016) comments that once identified and collected, interpretive skill is needed in order to ascertain the meanings of the material that has been uncovered. Both these comments relate heavily to the documents provided by the stakeholder. A review of the material was necessary, with a general note of what the documents relate to providing the opportunity to identify key resources that included: 'Tynebikes News' and 'Tyne Biking', Tynebikes newsletter from 1983-1997, which was generally produced quarterly (with some omissions, especially during 1986, 1994 and 1996); review of meeting notes; reports, documents and flyers produced to send to members; and correspondences with the Council regarding key issues (cycle routes, cycling infrastructure and provision). Documents such as this are viewed to have substantive meaning as these were created and written in order to achieve something or get something done (Bryman, 2016). Whilst the content is a key point of focus, it is also "important to be attuned to the significance of documents in terms of the parts they play and are intended to play in organisations and social life in general" (Bryman, 2016, p.562).

Engaging with these sources of information again added to the argument of wanting to understand the points of view and perspectives that reflected the social sites and opinions they wanted to get across. But as Bryman discusses, it is important to consider that the documents available do not provide an objective account but rather, provide a particular account of the social sites due to what articles were kept and were accessible whereas some may have been destroyed (2016, pp.553-554). However, this 'objectivity' tone does not align with my philosophical ontology as I have already rejected that this research aims to seek any objective truth as I argue that are multiple truths.

4.3.4   Reflections on Combining Data Collection Methods

Utilising a variety of data collection methods across the research process enabled a greater confidence through the process of crosschecking findings (Bryman, 2016; Seale, 2012, Denzin, 1970). Seale (2012) rightly points out that this provides further confidence in the presentation of research findings and adds validity to the research process. In utilising a combination of methods, the data collection engaged in the process of 'methodological triangulation' (Seale, 2012). The variety of data collection methods used (participant observation, semi-structured interviews, and documents as sources of data) provided insights about the same events or relationships and assisted in reducing the limitations and criticisms of other methods of data collection (Erlandson *et al*., 1993). Additionally, this methodological process produced data that throws light onto "different social or ontological phenomena or research questions" and therefore enables different 'levels' of answers to the research that may not have been possible with a singular data collection method approach (Mason, 1996, p.149). For instance, in relation to ethnographic methods, Hammersley and Atkinson (1995, p.253) bring to attention how "the author/ethnographer has implicitly claimed a position of omniscience and the authority to speak unequivocally of and for the people in question". As a result, the use of document analysis and interviewing in the empirical research chapters gave participants a direct voice in this research thesis.

Where possible, the process of triangulation of interviews, observations and document analysis enabled a better data generation for analysis. This is not to say however that all social sites generated extensive data for each collection method. Rather, as shown above, the various data collection methods provide alternative opportunities of data and were utilised to varying degrees throughout the research process depending on what was deemed necessary and available (see Figure 4-2). For instance, interviews were identified as a suitable method of data collection once observations had generated further, more direct questions that were unanswerable through observation alone. Interviews provided opportunities to verify and further explore comments and conceptualisations derived throughout the observation process whereas official documentation provided a further longitudinal aspect to the research as well as providing insight into particular social sites practices and engagement with its members. Through the process of triangulation, these data collection methods

interacted with one another, mutually supporting and cross-examining the data gleaned, contributing to a wider and more holistic presentation of cycling culture within Newcastle.

Social Site	Tynebikes	Newcastle Cycling Campaign	The Cycle Hub
Participant Observation	12 events in which former Tynebikes members were in attendance of.	9 events which were organised by NCC and a further 10 events in which NCC members attended.	12 observational visits to The Cycle Hub and 11 social ride attendances.
Semi-Structured Interviews	6 interviews in total with 5 stakeholders.	7 interviews in total with 4 stakeholders.	4 interviews with stakeholders and 10 informal discussions with users of The Cycle Hub.
Documentation	Archived material (1982-2001) containing a collection of newsletters, flyers, newspaper clippings, organisation meeting notes, internal and external correspondences, memos, organisation accounts and other notes.	Review of campaign position statements, policies, information pages, and annual general meeting reports. Further systematic analysis of online web posts, 131 posts of interest identified.	Electronic review of The Cycle Hubs website and associated partners (e.g. British Cycling) and collection of advertisement material on display at The Hub.

Figure 4-2 Summary of key data collection in regards to the three social sites.

One particular example of this is the process of Tynebikes in which participant observation started with the attendance of the Newcastle Cycling Stakeholder Forum in which a further review of its official documentation including the previous forum minutes revealed Tynebikes involvement during the early 2000s. Through participant observations I was able to identify those individuals still present within the cycling population who were attending various events. Informal discussions with those individuals led to more extensive interviews and from this a large collection of official documentation relating to the campaign, especially between the years of 1982 and 2001 was provided. Figure 4-3 outlines this process, conveying how the various methods of data collection were able to inform one another, consequently strengthening the data collected.

Nov. 2014 • *Participant Observation* of Newcastle Cycling Stakeholder Forum

Sept. 2015 • Review of forum minutes and identification of Tynebikes, *Official Documentation*

Jan. 2016 • *Participant Observation*, identification of stakeholders from Tynebikes still in cycling population

Mar. 2016 • *Interviews* with Tynebikes stakeholders

Jun. 2016 • **Official Documentation** including newsletters and minutes of meetings provided for analysis

Figure 4-3 Tynebikes method of analysis example.

Upon reflection, the utilisation of the three data collection methods in varying degrees across the three social sites shaped the empirical chapters in various ways. For instance, The Cycle Hub chapter (Chapter 8) draws heavily on participant observation, both observing and regularly talking to users of The Cycle Hub and participants on the social rides. As such the chapter contributes heavily to understanding cycling-as-performance, observing individual performances and nuances of the practice in action. This contrasts with both the Tynebikes (Chapter 6) and Newcastle Cycling Campaign (Chapter 7) chapters which somewhat fail to explore individual performances. Rather, due to the use of semi-structured interviews and documentation analysis, these chapters focus primarily on cycling practice-as-entity, highlighting a particularised practice of cycling over that of identifying multiplicities of elements that The Cycle Hub (Chapter 8) draws out.

It can be argued that had I employed ethnographic methods such as 'ride-alongs', as done in the Cycle Hub chapter, with stakeholders of Newcastle Cycling Campaign and Tynebikes, I could have analysed the relationship between practice-as-performance and practice-as-entity further. This could have potentially highlighted further understandings of how current performances by stakeholders, who seek to alter the broader cycling practice, may do so through their own performances.

115

4.4   Research Analysis Approach

Bryman raises that "one of the main difficulties with qualitative research is that it very rapidly generates a large, cumbersome database" (2016, p.538). In order to manage the generation of data from the three data collection methods previously mentioned a thematic analysis approach was employed. Thematic analysis enabled the construction of themes and sub-themes, which enabled the ordering and synthesising of the data in relation to the research questions of the thesis (Bryman, 2016). Whilst themes maybe used as a way of summarising and sharing the data, Rivas (2012) argues it is important to move beyond simple reporting of themes and instead to consider the underlying concepts. As such, this draws attention to the researches broader aim of utilising practice theory in cycling research. As a result, Chapter 2, the theoretical literature review was used in conjunction with a thematic analysis approach to construct the themes and sub-themes throughout the empirical research. Chapter 2.1 establishes a generalized structure of practices, highlighting key elements of materials, competences, and meanings as well as the understanding of both practice-as-entity and practice-as-performance, communities of practice, and systems of practice. These understandings provide a framework in which to answer *how do cycling social sites contribute to cycling practices and forms of cycling culture*? Chapter 2.3 introduces an understanding of trajectories of practices through the introduction of a number of metaphors and processes. This section therefore provides a valuable framework in which to answer *do cycling social sites affect trajectories of cycling?* And finally, the use of practice theory as an analytical framework in this thesis' methodological approach contributes to the third and final research question in understanding *what is the value and contribution of practice theory as an analytical framework in cycling research?*

The analysis of the qualitative data itself was supported by computer-assisted qualitative data analysis software, NVivo. Software such as NVivo does not automatically code data for the researcher as the researcher must still interpret his or her data, code, and then retrieve the data (Bryman, 2016; Rivas, 2012). Rather, software such as NVivo assumes the manual labour of grouping and ordering the data as analysed by the researcher. The coding of data is referred to 'nodes' that acknowledge a collection of references about a specific theme or sub-theme as

collected through the data collection methods (ethnographic observation, semi-structured interviews and archival analysis). Whilst Nvivo could have assisted with the analysis of the research material further, for the benefit of this research it was used to help structure the vast amount of qualitative data collected. In order to successfully analyse the data: ethnographic observations were typed up from paper to word based documents on the computer to be sufficiently analsysed; interviews were transcribed; whilst archival material was analysed first when reading through the material before transcribing important sections to word based documents to be further analsysed in Nvivo. As a result this was time consuming, yet it did contribute to the analysis and re-analysis of data enabling themes and sub-themes to emerge from the continual analysis of the data.

4.5   Reflection on the Fieldwork Journey

This section of the chapter discusses three particular observations made throughout the research process of approach that I took, which I felt impacted upon the research profoundly. Firstly, the impact of working and living in the same community raised questions of when I was and was not researching. Secondly, having cycled regularly throughout the course of my life casts light on a particular knowledge and performative assumption of cycling in which I have a level of understandings, skills and competences associated to the practice of cycling. And finally, my role as the researcher also affected by how I approached and engaged with the various social sites. Within the cycling field, I was very aware of researcher bias by fully immersing myself within a particular social site and thus alienating other social sites in the process. I feel it is necessary to discuss these aspects as they were continually stumbled upon and subsequently, steered the research.

4.5.1   Working in the Same Community

A potential issue is the relationship between oneself and the field. As Schensul and LeCompte (1999) suggest, ethnographic research usually takes place outside of their own field or community and enter another social world where societal aspects such as behavioural and cognitive patterns and institutional settings are different to that of their own. As an ethnographer, it is of importance to learn these new 'rules, norms, boundaries, and behaviours' through the establishment of relationships with other

members in the field (Schensul and LeCompte, 1999). However, this is not to say that all research by the ethnographer takes place outside of his or her own community. Rooted within social and cultural anthropology and later utilised by sociologists in the early twentieth century (Hammersley, 1998), ethnography has traditionally been used in order to conceptualise society, whether that was in the writings of travellers of anthropology or the pre-occupation of sociologists engaging in the study of their society or societies surrounding them..

In the case of this research project the fields between both the researcher and the one being explored is somewhat overlapping. It is critical to acknowledge that I used the city environment mostly on a daily basis, I engaged with the city through coming to and from university. But prior to this I had lived in the city for two years and visited on numerous occasions. I am therefore already engaged with certain rules, norms, boundaries, and behaviours both on a conscious and unconscious level. Hammersley (1998) warns of the potential miss-assumptions that familiar settings may provide. If the field is familiar to the researcher in that they may already be engaged with it in some way and therefore not totally new to it, there is a danger of reducing observations and others' perspectives down to stereotypes. On the other hand, this doesn't discount a jarring between both the researchers own life and the field of research. As Agar (1996, p.102) discusses, the benefits of a traditional form of anthropological fieldwork is that you are generally researching in a different country and complete different forms of cultural practices. But working in the same society in which you live does not remove this issue of one large jolt of a culture shock when moving between the two places. Rather, repeated mini-doses of culture shock or 'fighter pilot' stress appear between times of entering and exiting the field of research. This issue was identified throughout the research project and became a longstanding issue referring to my reflexivity and the presentation of self. Internal questions were asked when was I performing and not performing, who was I performing to, why, how and if this altered why did it. These were all crucial questions to ask as the research itself, as to understand how I position myself to people and relate to them potentially reveals more about the situation that I maybe previously was unaware of.

This experiential wealth gathered prior to entering the field therefore provides issues of attempting to 'de-indexicalize' myself. 'Indexicality' refers to the necessary background knowledge needed in order to understand a message (Agar, 1996, p.58). Schensul and LeCompte (1999, p.71) establish that no single researcher is ever fully identifiable or representative with the members of the field under study but there is a methodological concern that I will have drawn on previous conversations, casual observations, childhood experiences and other instances outside of the research environment when attempting to describe something particular. It is this awareness of the ethnographer's culture-personality background that must be acknowledged and taken seriously in the attempt to limit the influence it has when generating research. But this does have its benefits to a certain extent. The ability to act and appear in a less obtrusive manner enables others who are of interest in the research to behave in a normal manner within the setting. This is important as the empirical research of situating the researcher within the 'field' is so that practices, behaviours, norms are as authentic as can be, instead of attempting to replicate it in a controlled environment or merely discussing it. This requires high levels of awareness and concentration as the task requires the ability to listen and observe whilst recording and understanding the language used in relation to the field of setting. But this isn't only reduced to verbal language but also body language and the interpretation of the behaviour. The ability to reflect upon how all these elements of what is heard or seen affects the behaviour, attitude, and values of my own (Schensul and LeCompte, 1999, p.74). Thus, a process of enculturation occurs whereby the ethnographer exposes himself or herself to process of socialisation whilst maintaining a level reflexivity in order to studying and document their own transformation.

4.5.2   Being a 'Cyclist'

Gans (1991) contends that the participant observer cannot in fact study his or her own people or work in a setting close to his or her life due to the temptation to participate or the opportunity of including feelings that were present before the start of the study. But it depends on what Gans perceives as the researcher's 'own people'. This may refer to a national setting such as England where cultural codes and conducts maybe similar but not necessarily the same in different places, but also in relation to this thesis, it may relate to cycling-as-entity and those carriers of the practice. I feel it is

therefore important to raise here my experience of cycling in order to acknowledge how my experiences of being a carrier of cycling throughout my life may shape and inform my role as a researcher.

I have cycled throughout the course of my life, first of all as a child in which the bicycle was associated as a toy. I would generally cycle around the cul-de-sac which I regularly imagined as an oval race track with friends. But this 'track' was also used for running races and scootering races. Therefore, whilst I learnt to cycle at a young age my engagement with the bike was no more than an object of play amongst many other activities and toys. It wasn't until secondary school, college and part-time work (whilst at college and university) that the bicycle served as my key mode of transportation. Up until university I would regularly cycle on shared-use paths in my hometown, whereas whilst at university I mainly used the roads unless I had forgotten my lights, in which case I would use the path (I generally felt somewhat guilty when doing so). What is important however is that I didn't consciously choose to cycle rather it was either that or walking or getting the bus, with cycling generally being quicker and more reliable. Thus, I never consciously associated myself as a 'cyclist' in that I did not associate cycling contributing to my identity. I had no specific cycling attire nor did I have a bicycle helmet. My bike often lacked tender, love and care as I would rarely wash or oil my bike; I didn't know how to change a puncture; and the gear mechanism regularly broke due to continuous kerb mounting and dismounting at speed.

However, throughout the research process I have engaged considerably more with cycling. Through the engagement with others associated to the various social sites, my personal performances of cycling fluctuated over time. I own more than one bike and I bought a turbo machine for those winters where I thought I would continue cycling in the garage when the weather is poor, but have failed to do so. I have bought lycra shorts and cycling vests yet rarely go out cycling which warrants the use of them. The bicycle I use has thin tyres, dropped handlebars and cleats, yet the only time I use it is for trips that are otherwise difficult by public transport. Whilst I enjoy watching the large cycle tours on television I don't have the knowledge of the best gear set nor try to be 'king of the mountain' on Strava. O'Reilly's (2005, p.89) comment that "it is good to be naïve as well as knowledgeable" therefore somewhat

resonates with me in that whilst I am somewhat knowledgeable regarding cycling and was therefore comfortable in discussing the topic, there were also times where I had to ask for explanations or for stakeholders to further expand on what they meant. As outlined previously in the Chapter 4.3.2, many of the individuals who were of interest had expert knowledge in relation to Newcastle and their social site, which advanced beyond my general and broad knowledge relating to cycling. Therefore, it was expected that often individuals would be somewhat more knowledgeable in certain circumstances yet as the research process progressed, the frequency of which this happened reduced.

I was also aware that potentially knowing too much could also shutdown conversations or in-depth explanations with the understanding and knowledge I had already attained prior to the research (O'Reilly, 2005). But on the other hand there was also the potential perception of others assuming my knowledge due to my regular attendance at numerous meetings and events throughout the research process. When interviewing one individual they commented that "you're better aware than me at what's happening from the cycle campaigning at the moment" (Tynebikes, S2) whilst other interviewees commented "you know what drivers inflict on you" and "you know what I mean" (Newcastle Cycling Campaign, S2). It was evident therefore that those who were interviewed generally had a perception of myself and my knowledge and experiences as a result of my engagement within the cycling field. As a result, these comments would inadvertently shutdown conversations regarding that topic or at least prevent the insights and understandings of those I was interviewing. Therefore it was important to be continually reflective throughout the research and throughout conversations, not assuming things based on my own personal experiences but also to be aware when others assumed what they meant due to the assumption of my knowledge. Thus what was necessary in these instances was the need to probe for further explanation on what was said when such comments were made.

4.5.3 Researcher Bias

Some biases will be more apparent than others; some will slowly emerge whilst others may remain uncovered (Agar, 1996). Bias on the researcher's part can creep in through many different points and it is therefore critical for the researcher to remain

aware of this throughout the engagement with the cycling population. Over identification and participation in the field can contribute to the inability to reflect and observe behaviour of others. Furthermore, this over identification may result in ignoring behaviour that may be considered unethical or undesirable as well as contributing findings that are arguably partial and distorted (Gans, 1991).

This resonates strongly with one particular early experience during the research carried out for this study. As part of the Newcastle City Council's Cycling Stakeholder Meeting a 'Task and Monitoring Finish Group' was established (comprising of 5-6 individuals including myself) with the primary objective of identifying potential applications that monitor cycle use in Newcastle and ideas that would contribute to the 2015 Bike Life report. In order to gain further access I volunteered in the aim of observing conversations whilst understanding that I would at times have to participate in the testing of the applications and provide feedback. It was some time after this group had finished that I realised that when attending those meetings I became a full participant and neglected the observational aspect. At the time I had become too involved on an unconscious level. At an extreme, it is considered that researchers may "lose their sense of being a researcher and become wrapped up in the worldview of the people they are studying" (Bryman, 2016, p.439). It is considered then that the positionality of the researcher is compromised as (s)he loses sight of it, making it difficult for them to develop a social scientific angle when collecting and analysing data. In this instance I argued for the inclusion of cycling cultures bespoke to Newcastle in the Bike Life report, a personal interest related to this research project. As a result, two cycling social sites (Recyke Y'Bike and The Cycle Hub) are mentioned on page 12 of the 2015 Bike Life report on their contribution to cycling in Newcastle. Resultantly there is a sense that without my inclusion would this have had happened? This is a moment where the research had been wrongly steered by myself through the positionality I took as a participant.

4.6 Ethical Considerations

Whilst it is a mission to generate knowledge through rigorous research, this must be accompanied by upholding ethical standards and principles. It is generally considered within ethics to 'do no harm', however this seemingly all-encompassing and universal

slogan becomes vague, generic and of no use in providing a precise and guided process in maintaining ethical practice. This is due to the complexity of the dual mandate of generating new knowledge and upholding ethical standards, which create both conceptual and practical tensions that, emerge throughout various stages of the research process. Whilst the accomplishment of furthering knowledge and the upholding of ethical standards is desired, the prioritisation of the latter is paramount to the research study. The negotiation of these gains and losses on both sides are attributable to the 'do no harm' phrase, which remains critical throughout the research study.

4.6.1   Anonymity

Anonymity is usually regarded as a widely held goal, but due to the nature of the single case study the issue of anonymity became intensified and required a more bespoke and complex approach in maintaining confidentiality whilst still contributing and furthering knowledge.

Anonymity for research participants is considered necessary and sufficient in protecting the informants however, within the modern world, it is increasingly difficult to maintain that identities will remain hidden (Dewalt et al., 1998). Giving research participants pseudonyms to protect identity is a basic form of doing ethical research. Yet Ellis (2007) warns of not working hard enough in preserving anonymity and that the pseudonyms themselves do not mask other descriptive details that can just as easily reveal who the individuals are. Demographics such as gender, age, ethnicity etc. can act as tools of identification. Both Damianakis and Woodford (2012) and Van Den Hoonard (2003) acknowledge that the request for this information as ways to follow participant narratives throughout the study and presentation of analysis increases the challenge in maintaining confidentiality. The consent form acknowledges this challenge faced by the researcher when pledging to maintain anonymity and confidentiality of the study's research participants. But, the materiality of a consent form itself is an artefact of who the individual is, creating a trace of them through the research, thus contradicting anonymity itself.

Although it sounds simplistic, identification and therefore the breach of confidentiality go beyond the name and demographics of the research participant.

123

Threats to anonymity still prevail even when providing pseudonyms and not using demographic or characteristics descriptors of the research participants. The use of participant's words throughout the analytical chapter such as direct quotations is considered a normal practice however even at this point the researcher runs the risk of unintentionally disclosing a participant's identity (Damianakis and Woodford, 2012). The way they talk and therefore the quotes in the analysis chapter or the topic of discussion their view represents contribute to the compromising of the individual's confidentiality (Van Den Hoonaard, 2003). Resolving this issue is to reflect back onto the original issue and establish whether the details of the research participants are necessary. Damianakis and Woodford (2012, p.712) comment "the more authentic or truthful the representation, the greater the vulnerability of participants" but would the removal of these details limit the authenticity or truthfulness of the representation? It can be questioned whether it's the priority in creating a realistic resonance of the lived experience, or whether the gestalt experience that transcends the details in the analytical process is most important *(ibid)*.

In complicating matters further, the focus upon a singular case study that utilises social groups in which individuals are aware of one another complicates the objective of attempting to maintain a level of anonymity whilst still generating knowledge in relation to stakeholders being able to identify one another. This is not a fault of the research as the basic proponents of ethnographic research is formed on this in-depth analysis of a community in which research participants are most likely to know one another. As a result the following extract on the information sheet provided to each research participant outlined the potential risk of engaging in the research study.

> As the cycling community is relatively small, other people may assume you took part in this study because of your involvement with cycling in Newcastle. Furthermore, the information you share during the interview will reflect your perspective and experiences of the social community of cycling in Newcastle; therefore, some people may be able to identify you from your comments. Whilst there are no negative consequences envisioned for you in taking part, if there is a problem; please discuss this with myself (contact information below).

The decision to have the comments of participants attributed to their representative social sites was a result of the difficulty to maintain anonymity of such distinct social sites within the geographical area outlined once basic descriptive details had been established.

With this said it could be considered that this is just over thinking the situation for the fear of compromising an individual's anonymity. The natural accretion of daily life overwhelms an individual into forgetfulness, maintains a preoccupation of other things or there maybe be a general lack of interest with the research being conducted (Van Den Hoonaard, 2003). Additionally, not everything recorded is used with the actual use of data and quotable interviews being relatively low (Ellis, 2007; Van Den Hoonaard, 2003). Nonetheless, to assume this approach would be fatalist. The decision to include particular information is therefore dependent on several key factors discussed above, but nevertheless it remains paramount to this research study that the production of knowledge should not be generated without the consideration of how this may negatively affect the research participants.

4.6.2   *Presentation of the Researcher*

The goal of ethnographic research is the production of knowledge and the obtaining accounts of social phenomena. An ethical issue that arises however is the process in which to go about collecting this true account. As already discussed in the 'Overt Ethnography' section I took an overt role to the research, as not to misinform or take advantage of those being researched. Agar (1996) contends that this introduction happens when meeting someone new until there is a rapport that exists and the researcher and their research is common knowledge. This overt nature to the research however is somewhat difficult to maintain throughout the course of the research process. It is to be argued here that the perceptual binary between overt and covert research is somewhat difficult to establish with the contention that there is always a level of covertness to one's research. This is not to suggest that the research fails to maintain a respectful level of ethical consideration of informing his or her respondents but rather this idealised approach of inform and consent is considerably more complex.

Hammersley and Atkinson (2007, p.210) state, "Ethnographers rarely tell *all* the people they are studying *everything* about the research". Just like the participant-observation spectrum, it may be useful to consider the covert-overt approach of the researcher on a spectrum as considering it as a binary may create pitfalls for the researcher. Roth (1962) questions whether a researcher can ever be fully overt with the population they are working with whilst Bryman (2016) expands upon this by noting that whilst a researcher may wish to be overt, there may be people who they come into contact with who are unaware of the researchers status. But it should also be considered whether it is actually beneficial to ever be fully overt. Some secrecy it is argued is necessary as not to influence or skew data collection through informants potentially providing information they think the researcher may want to hear. Secrecy or a level of covertness was something that was continually confronted and considered when conducting the research in order to weigh up whether it would contribute positively to the research without undermining the informant's rights.

As previously discussed, I referred to myself in encounters in the field as a student of Newcastle University and was interested in cycling and particularly cycling culture in cities. Explaining who we are however is more than a methodological problem. This is an act, for which I as a researcher am held accountable and it is therefore of great importance to inform those involved of who I am, my role, and what I want. But, as Agar (1996, pp105-107) demonstrates, there are different ways of explaining my role as a researcher and the presentation of myself. I could have introduced myself as having an interest in cycling, which is technically correct, but arguably not as informative to those who I was engaging with, as this was considered a general commonality when attending the events, meetings, social gatherings etc. On the other hand, at the point of entering the field, I could arguably be over informative. If I were to say: "I'm here to write a thesis on you and the cycling social sites impact upon the trajectories of cycling in Newcastle", this would affect the response of individuals as I'm stating that I intend to observe them and their responses directly. Therefore for the situation at the time, the description of my role was informative albeit restricted in not providing a total explanation of my research intentions. The presentation of self isn't necessarily categorized as being either 'ethical' or 'unethical' but rather refers to situations where the description of my role is better suited. The presentation of myself

at the point of entering the field therefore is argued to have been adequate, although it did retain an element of covertness.

The provision of information was mostly utilised when collecting field notes in public settings, for example, in and around the city, in the cycle hubs and at cycle events. Agar (1996) observes however that ethnography is not neatly packaged and that in any situation people may drift in and out of situations. He questions therefore "must everything stop until the ethnographic role has been described to the newcomer?" (Agar, 1996, p.108). Bell (1977, p.59) refer to this issue as the sociological equivalent of a police caution of persistently having to mention, "Anything you say or do may be taken and used as data". If this were to be actioned, it would be to the detriment of the research study itself making it highly disruptive and considered to even "kill many a research project stone dead" (Punch, 1986, p.36). To further complicate the situation, due to the nature of some spaces (in and around the city and The Cycle Hub especially) participants would come and go at different times. It meant there was a large difficulty to inform or indicate that the research was being conducted. This led to a general feeling of anxiety or guilt in which I felt a sense of deception. Observation of others creates a psychological perception of 'spying' on them and even though measures are taken not to harm those involved, the activity remains a psychological form of espionage (Burgess, 1991; Gans, 1991). There is no way to suppress the guilt as Gans (1991, p.59) states, "often the only way to get honest data is to be dishonest in getting it". For Dewalt et al. (1998) this is exactly what they regard as the strength of this method. If informants were more consciously aware of their involvement or as a researcher I continuously informed them of this the information acquired would be less rich.

> "We want them to forget, for a time at least, that we are outsiders. We want to develop sufficient rapport and to have them become so comfortable with us as community participants that they will share insights and information that only insiders would know." (Dewalt et al., 1998, p.273)

This contrasted with other events such as meetings where the structure of the event dictates that everyone is present at a particular time and therefore can be informed all

127

at once of my intention of research. But even here there are potential slips where individuals who are late may miss the intent of me being there. But these events were regularly 'public events'. For instance the Cycling Stakeholders Forum meetings had minutes taken and was available for anyone to attend and therefore it was regularly considered that discussions at these events were not deemed 'private' or 'confidential'. This distinction of being in public therefore and not in private justifies the ability to not inform the population of my intentions on a consistent basis for the fear of Bell (1977) and Punch's (1986) predictions. If one was to be honest and open from the start and attempt to fully explain my motivations for the research, those who I observe would suppress or hide facts and feelings that are significant in understanding the social situation for the fear of feeling ashamed.

To complicate the matter further, due to being in the field for a long duration of time, my original announcement of being there to study them maybe have been forgotten. As a result, individuals may assume and react to the researcher as an individual participating. The issue then is to manage the situation, whether to participate or inform them of your responsibility. Gans (1991) notes that individuals expect a level of participation in order to remain, but this level of involvement is rarely a demand for intense involvement and rather just an obligation to participate behaviourally and express interest from time to time. This was experienced on a number of occasions, one when seeing a member of the Cycling Stakeholder Meeting who introduced me to their friend as "a regular at the stakeholder meetings" and when I asked to interview them in relation to their involvement in a cycling social site, my notes from the event mentioned: "there did seem a slight glaze on the face. I don't know if that was potentially me conning him on who he thought I originally was". In this instance I had realised that I wasn't necessarily considered as an observer that I thought I was but instead this had been forgotten and assumed that I was a full participant. Furthermore, When Safe Pedestrian and Cycling Environment for Gosforth (SPACE for Gosforth) was attempting to expand their committee beyond the main 9 stakeholders; I was among a dozen other individuals invited based on our involvement and engagement with the campaign. Throughout the course of the event, their conscious effort to get everyone using 'we' in relation to the campaigns next steps made it evident that their perception of my attendance and interest in the campaign was one of a full participant.

It was moments like this where my role as a researcher would come into question and resultantly the role I had within the case study of Newcastle.

4.7   Limitations

In this final section, I highlight how I may have been interpreted in the cycling field. It is highlighted that certain connections and engagements with particular stakeholders may open but also close doors to others in the cycling field thus providing one of many representations of Newcastle's cycling culture.

4.7.1   Remaining Reflexive as a Researcher

The presentation of the researcher is not only reliant on the researcher themselves but it is also important to consider how they are interpreted by others. Agar (1996) establishes that although you may provide an explanation of who you are, people will judge you on how you conduct yourself on a day-to-day business. Whilst it may be perceived that speaking to particular individuals, creating a rapport with them as well as being seen in certain places maybe seen as progression and opening doors to further individuals, it may also inadvertently shut doors to others (Burgess, 1991; Gans, 1991). The researcher's neutrality is therefore under scrutiny at this point with Gans observing that this adds to the anxiety of worrying whether "is one doing the right thing at the right time, attending the right meeting, or talking to the right people?" (1991, p.58). The issue then is not only the fear of missing out on something potentially important but also how as an individual others interpret you and how this had affected interactions and discussions with them.

Traditional ethnographic work would generally access the field through a number of 'informants' who are generally considered deviants and stranger-handlers in their respective community. In time the informant's cliques would open up in which the researcher would then attempt to gain further access to the community (Agar, 1996). Although this would enlarge those potentially involved, it would also close off parts of other parts in the community (Burgess, 1991). Carrying out the research in a certain systematic way of attending many events to begin with and commenting to individuals that I was intending to research cycling cultures allowed myself to gain a broad interpretation of the cycling population whilst also attempting not to openly

associate myself with any one social site. This is not to say that this was without its limits though, as the particular events, meetings and places I attended would have in some way informed and shaped the research process and certain individuals may have read into non-verbal signs such as those who I associate with and spaces I occupy at the time. But what this did was to attempt to limit issues of the data being questionable and allowing opportunities for individuals to be aware of my real research intent through my overt nature.

Maintaining this reflexivity as a researcher was necessary, as the study comprised of three separate social sites in which their relationship with one another was of yet established. Therefore the idea of involvement that included large levels of participation was generally approached with caution for the fear of associating oneself too much with a particular group.

5   Newcastle's Cycling Culture

This chapter provides an opening piece on Newcastle's cycling culture, before exploring the three key social sites of Tynebikes, Newcastle Cycling Campaign and The Cycle Hub. Split into seven short sections, the chapter first introduces outlines Newcastle's cycling modal share since 1970 before then moving on to the second section which highlights the variety of designated cycle routes and paths throughout the Newcastle conurbation. The third section refers to the city councils policy, strategy and investment into cycling. The fourth section then turns towards the first of a number of sections which refers to cycling social sites. Here, both Tynebikes and Newcastle Cycling Campaign are introduced alongside another notable cycling advocacy group, SPACE for Gosforth, whilst reference is also made to the brief attempt of hosting critical mass rides. Like any other city, Newcastle has a number of cycling clubs, social ride groups, cycle businesses and shops (section five and section 6). However particular attention is drawn to the recent development of cycle hubs in the form of The Cycle Hub and The Journey, whilst Recyke Y'Bike refers to a local cycle charity that repairs and recycles donated bikes. Finally, section seven refers to two examples of mass-participation cycling events in Newcastle in the form of the Cycle City Ride and The Cyclone Festival. Whilst Newcastle maybe conceived as lacking a cycling culture due to its low cycling rate, this chapter introduces a variety of cycling social sites to suggest otherwise.

5.1   Cycling Modal Share

Cycling as modal share in Newcastle has been predominantly low with commuter cycling increasing from 0.8% to 2.8% between 1971 and 2011 (Office for national Statistics, 2016; Registrar General for England & Wales, 2002). Consistently below the national cycling level it does however reflect a different trend with English cycling levels decreasing from 4.3% in 1971 to 3.0% to 2011. Yet these minor increases and decreases of cycle usage maintain a similarity with one another of a marginalised transport method.

The figures must however be treated with some caution, as the 'Main mode of travel to work' census question provides a limited picture of cycling practices (Figure 5-1). Historically, Newcastle has been a city heavily reliant on Public Transport. This was

emphasised in the 1984 'Cycling in Newcastle – The Opportunities' report when it commented:

> "In Tyneside the lack of tradition of cycling can be partly explained by the historical twin effects of cheap and efficient public transport and the closeness of home and workplace common in ship-building and coal mining communities." (Tyne and Wear County Council, 1984, p.1)

As such, Public Transport has been historically larger than the national picture but does reflect the broader outlook of a decreasing modal share (Office for national Statistics, 2016; Registrar General for England & Wales, 2002). Car-use has replaced many journeys yet car usage is under-represented in Newcastle compared to the national picture.
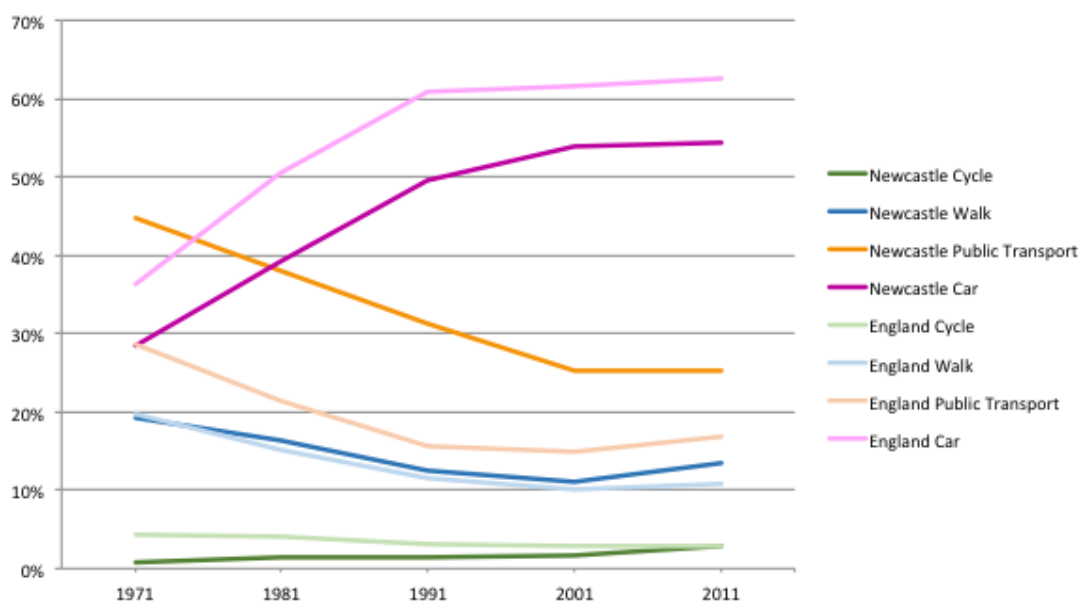
Figure 5-1 Main mode of travel to work in Newcastle & England, 1971 to 2011 (Census Data; Crown Copyright).

The cities car ownership level reflects this, which is low relative to the national picture, with 42% of the Newcastle population not having access to a car whilst the figure is lower nationally at 26% (Office for national Statistics, 2016). Distance travelled to work between 2001 and 2011 is somewhat similar. In reference to Newcastle, 50% of journeys to work were within 5km and 24% of journeys were between 5km-10km in 2001. This is comparable to 47% of journeys within 5km and

23% of journeys between 5km-10km in 2011 (Office for national Statistics, 2016, 2011).

More recently the 2017 Bike Life report, an assessment of city cycling in Newcastle, reports that cycling levels are somewhat higher with 7% of Newcastle residents cycling to work. It also reports that at least 18% of people in Newcastle cycle at least once a week (Figure 5-2). Funded as part of the Cycle Cities Ambition Fund and delivered by Newcastle City Council and Sustrans, the survey is of 1,110 residents in Newcastle and is therefore significantly lower in respondents to the Census. Furthermore, it is acknowledged of potential issues associated with asking people to self-report their behaviour and as such social desirability maybe present. It does however refer to and consider wider performances of cycling beyond commuter-based practices, providing a broader and multifaceted understanding of cycling performances in Newcastle.
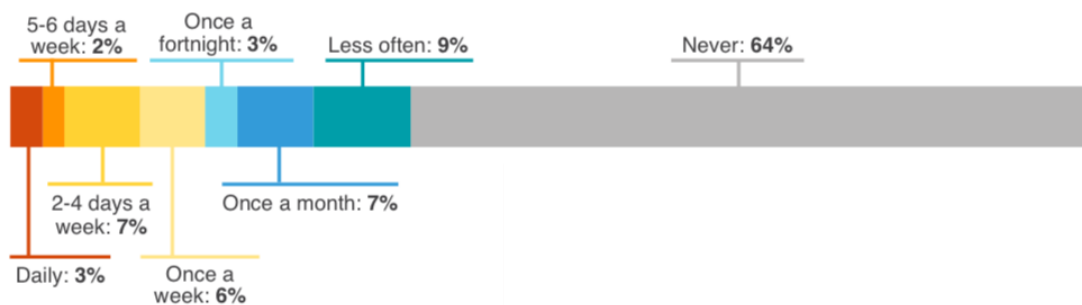
Figure 5-2 Cycling rates in Newcastle, 2017 (Newcastle City Council and Sustrans, 2017).

5.2   Cycling Environments

Like other cities Newcastle has a variety of designated cycle routes and paths. It sits on the final stretch of the Sea-to-Sea cycle route that starts on the west coast of England in Whitehaven. This and other routes on the National Cycle Network pass through Newcastle (Figure 5-3). They are supplemented by numerous repurposed 'waggonways' in the conurbation that now provide traffic-free access for cycling and walking.
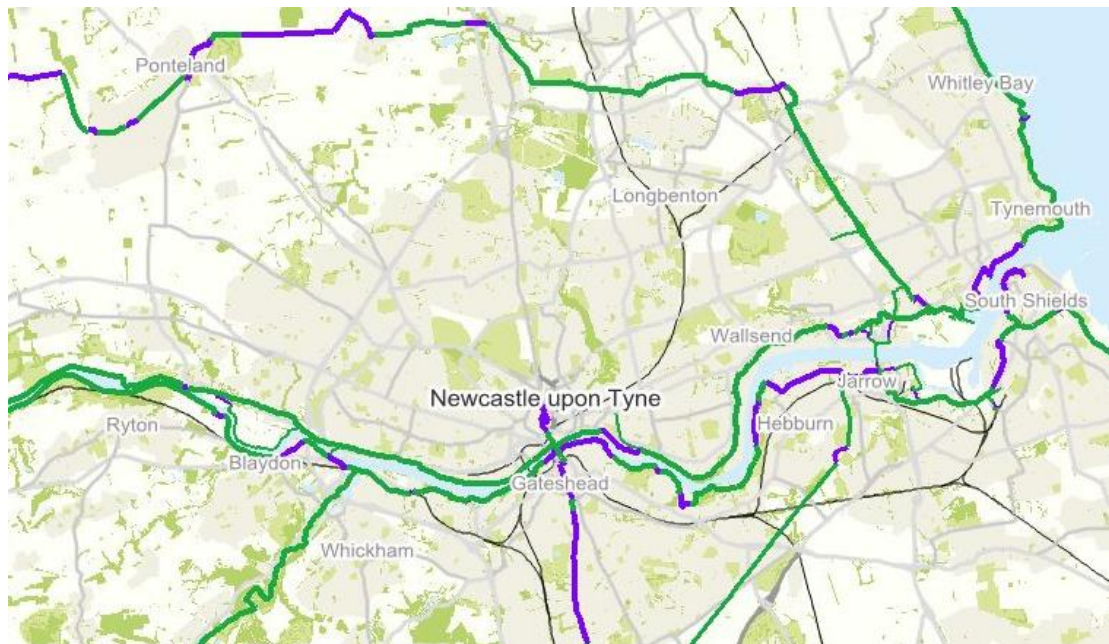
Figure 5-3 National Cycle Network routes, Newcastle.[6]

These strategic routes are supplemented by some on road and off road signed paths developed over time. Again typical to many UK cities they are useful but often lack connectivity. In relation to the city centre and cycling environments emphasising more utility based cycling, Newcastle's most recent cycling plan (Newcastle City Council, 2011) outlines the development of seven strategic cycle routes which converge on the city centre. A number of these have been constructed or partially constructed as a result of successful cycle funding bidding as part of the Cycle Cities Ambition Fund. These aim to solve the connectivity problem in a number of corridors but have encountered implementation difficulties common to cycle route rollout in many UK cities.

Transport is often defined as a derived demand in order to access places of work, shopping, leisure and social practices. In understanding that particular practices may 'bundle' together (Shove et al., 2012), Watson highlights that such practices may engender the need for particular modes of mobility (Watson, 2012, pp.493-494). Newcastle's industrial history throughout the 19th and 20th centuries relate to coal mining and shipbuilding. Reflective of the 'ordinary city', these traditional industries

---

[6] The green routes represent traffic-free sections of the National Cycle Network, whilst purple sections refer to sections of the National Cycle Network that are on the road.

declined rapidly throughout the 1960s/1970s, with the city becoming more reliant upon the services industry and public sector employment (Bell and Davoudi, 2016). With this notable 'out-of-town' business parks and shopping parks close to or in the wider Tyne and Wear conurbation, including Quorom Business Park, Cobalt Business Park, the Metrocentre and Silverlink Shopping Park have been developed since the late twentieth century. The metro (light-rail) and bus services (sometimes used in combination) provide convenient access to the business and shopping parks, but they are also predominantly located at major intersections of the local road network (including the A1 and A14). The National Travel Survey, a more longitudinal dataset reflective of a national picture for England shows that the average trip length in general for journeys has increased from 4.7 miles in 1972 to 6.6 miles in 2018, a 40% increase in trip distance (Department for Transport, 2019). It can be considered then that the wider land use and employment practices from the late twentieth and early twenty-first century increased distances between practices of working, socialising and shopping, engendering particular modes of mobility (Watson, 2012). Whilst cycle routes in Newcastle are useful, they lack connectivity and like many 'ordinary cities' in England, cycling as mobility became largely disregarded and replaced by competing practices of driving through the growth of the system of automobility.

5.3   Cycling Policy and Investment

Historically a number of reports, policies and strategies have focused on cycling practices in the city. 'A Cycleway System for Newcastle' (Figure 5-4), produced by the Tyne and Wear County Council and endorsed by the City Council identified six potential key routes stretching out from the city centre and nine cycle parks (Tyne and Wear County Council, 1975). In 1984, the Tyne and Wear County Council hosted an event 'An Approach to Cycling' as a result of Tynebikes criticism of the 1983 City Centre Local Plan. Representatives both locally (from both Newcastle City Council and Tyne and Wear County Council) and nationally (Department for Transport representative; Peterborough Development Corporation; and Greater London Council Cycling Project Team) attended the event with presentations by Tynebikes and the Tyne and Wear County Planning Department. A report 'Cycling in Newcastle – The Opportunities' was presented which reviewed existing cycling use in Newcastle and highlighted the lack of development of the 1975 Plan. A number of on and off

carriageway opportunities were presented, with particular emphasis on the development of waggonways.

Figure 5-4 Newcastle's first envisioned cycleway system (Tyne and Wear County Council, 1975).

Newcastle's first 'Cycling Policy and Plan' (Newcastle City Council, 1991) presented a 'tolerate but do not encourage' discourse, with a storyline of cycling being an unsafe mode of transport created through the use of numerous statistics relating to cycling casualties, emphasising its vulnerability. The cycling policy went as far as to advocate against the encouragement of cycling and the extreme caution of pursuing a 'get on your bike' policy.

> "Cycling Policy 5.4. In turn, this leads to what may be considered to be the more controversial conclusion in that in view of the present level of facilities provided, it is NOT proposed to encourage significant growth in citywide cycling." (Newcastle City Council, 1991, p.143)

A 1998 'Cycling Strategy', was instigated by a local councillor who was interested in enhancing both the public transport and cycle network (Newcastle City Council, 1998). The strategy promoted 'cycling as an alternative for all', championed as a

realistic and viable practice in challenging the unsustainable growth of motorised traffic, reducing the problems associated to private car use on congestion, health and the environment. This represented a significant shift in the discourse on cycling's meaning from the 1991 policy and plan from a practice for those without access to a car (the old, the young, non-car owner or preference to cycle) to a more mainstream role.

Connected to this strategy, Newcastle City Council failed in securing funding for its 'Accessible City' application from the Millennium Commission in 1998. This was a citywide project to enhance walking, cycling and public transport. In addition to the cycle strategy and the Accessible City application, the stakeholder also established the 'Newcastle Cycling Stakeholder Forum' during this time. The emphasis of the forum was to create an environment where local cycling stakeholders could meet and strategically discuss various developments and issues relating to cycling before filtering into wider transport forums at the city council. Whilst in its earlier years, the forum lacked regularity (Figure 5-5), there has been 67 official meetings since records of it began in 2002 up to September 2017, with 249 individuals (Figure 5-6) representing either council departments, cycle social sites, or general cycling individuals.
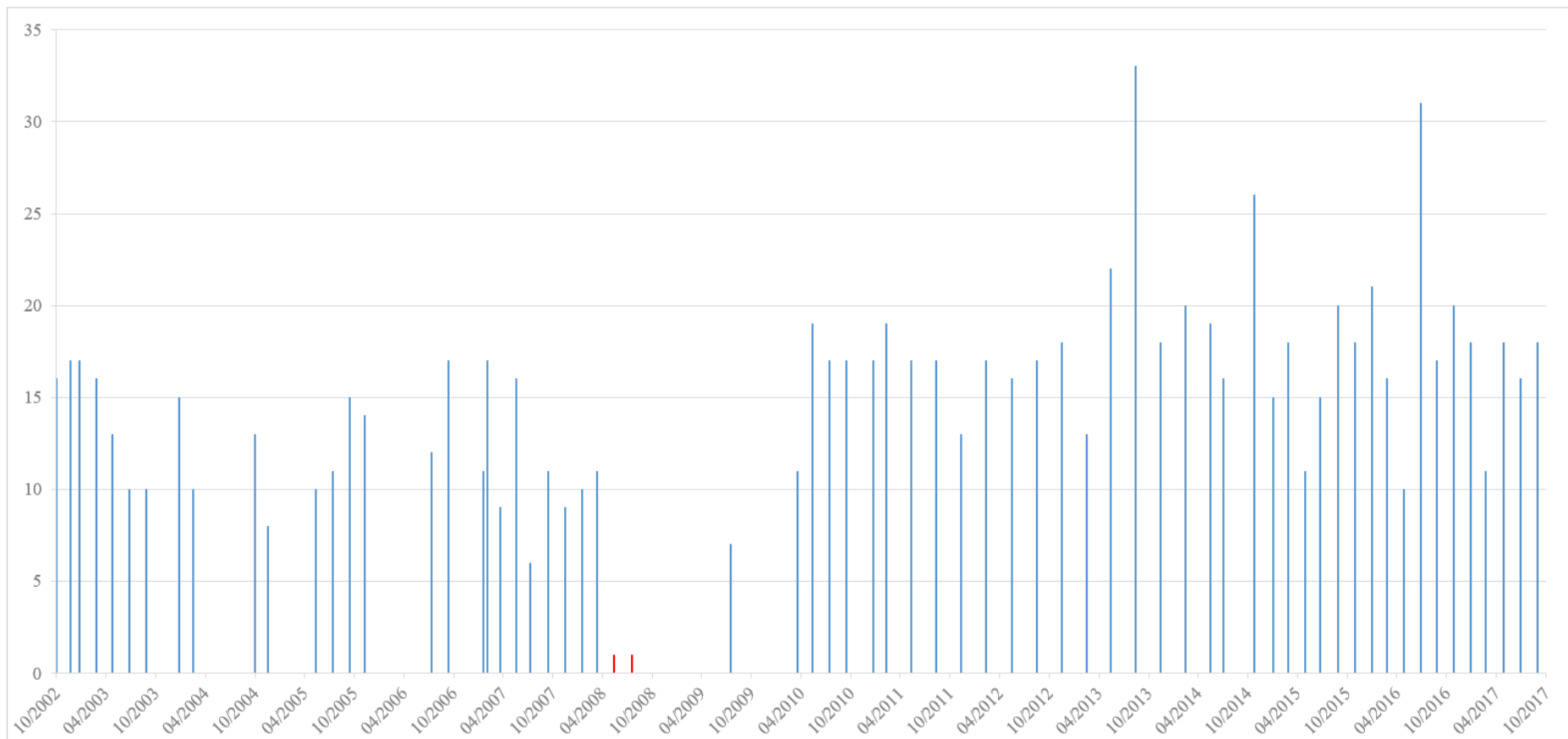
Figure 5-5 Newcastle Cycling Stakeholder Forum Attendance.[7]

---

[7] It should be noted that the two data points marked in red refer to two meetings that took place but without any reference to the number of individuals in attendance.
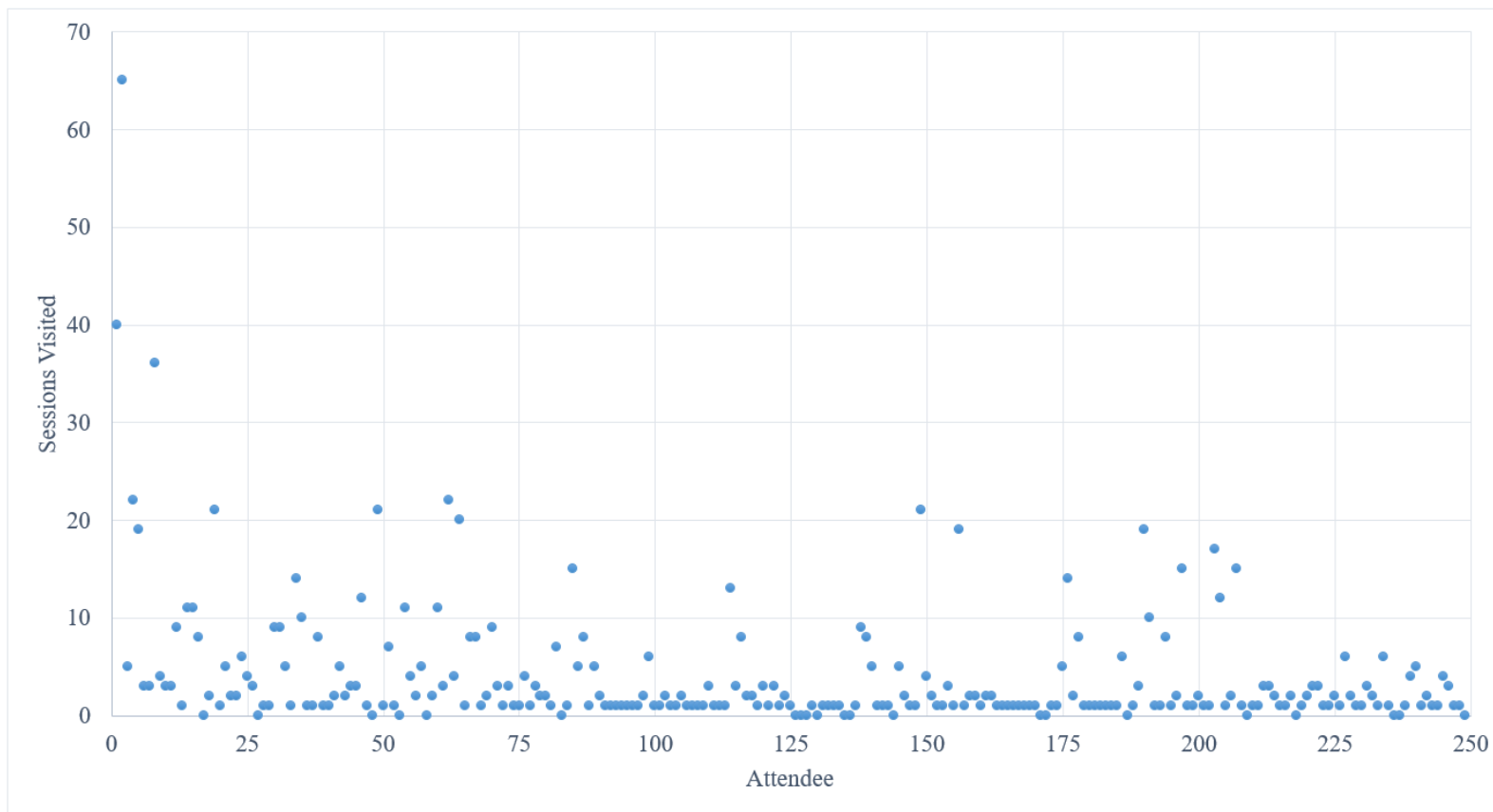
Figure 5-6 Number of Newcastle Cycling Stakeholder Forum Sessions Visited by Attendees[8]

---

[8] Both Figure 5-5 and Figure 5-6 were generated by collating the minutes for the relevant stakeholder forum meetings. These are freely accessible and available at:

https://www.newcastle.gov.uk/parking-roads-and-transport/cycling/newcastle-cycling-forum/cycling-forum-minutes

More recently, in 2011, Newcastle City Council published its third cycling policy/strategy document, 'Delivering Cycling Improvements in Newcastle, a Ten Year Strategy (2011-2021)' (Newcastle City Council, 2011). Whilst there is still reference to the importance of more cycling (personal health, environmental and cost benefits), the cycle strategy acknowledges and envisions cycling as an everyday ordinary practice:

> "Cycling should be seen as a normal, everyday thing to do. It is a safe, sensible, cheap and healthy, form of transport. On a daily basis, this means that families who now routinely use the car to travel distances of two to three miles, say for the school run or to work, use their bikes." (Newcastle City Council, 2011, p.5)

Advocating both on and off road facilities acknowledges how certain material infrastructures are preferred by particular groups of people. Like other strategies before it, a 'strategic cycle network' was also proposed and tentatively mapped out, somewhat similar to its historical counterparts.

In 2013 Newcastle was one of eight cities awarded funding by the Department of Transport as part of the Cycle Cities Ambition Fund (CCAF), reflecting their position as 'leaders of change' (Gov.uk, 2013). As part of CCAFs first wave of funding (CCAF1) in 2013, DfT awarded Newcastle £5.7 million, which was matched with a local contribution of £6 million. Newcastle along with the other seven cities were subsequently award a second wave of funding (CCAF2) during 2015, in which Newcastle received £10.6 million, which was supplemented by a further £4.4 million by the local authority. Newcastle City Councils main emphasis and use of the funding was the development of the strategic cycle network as established in the 2011 cycling strategy. It was also identified that the grant would fund the development of cycle friendly areas through Sustrans' 'Do It Yourself Streets' project; development of cycle-rail integration with the Tyne and Wear Metro system; and the establishment of an active travel centre (The Journey).

5.4   Cycle Campaigns and Activism

Like many cities across the UK, Newcastle has had regional branches of national organisations, which have taken a keen interest in cycling including Friends of the Earth (FoE) and Cycling UK (known as CTC until 2016). Tynebikes archive material reveals some letters sent by local branches of Friends of the Earth to the local council at the time. During 1975 FoE North East's Transport Committee presented a report to the City Council, which coincided with the publishing of the 'A Cycleway System for Newcastle' report. A further 'bike-in' on 10th June 1978 was staged by FoE Tyneside which started and ended at the Civic Centre. Submitted to the Development, Planning and Highways Committee, the 'bike-in' was "to notify everyone that cyclists in and around the city feel that their needs are not being properly cater for".

Whilst FoE were somewhat active, Tynebikes, a cycling campaign for cycling facilities on Tyneside, was established in November 1982 due to neither FoE, CTC nor any other organisation "taking an active interest in the development of urban cycling in Tyneside" (Tynebikes, 1982). Whilst the majority of members of Tynebikes were themselves members of Friends of the Earth or CTC, the new organisation was established in order to take a more active interest in 'urban cycling' facilities in the Tyneside area for cyclists. Membership generally stood between 100 and 200 people (Tynebikes, 1991c, p.16; Tynebikes S1) with cycle rides and lobbying forming two particular strands of the campaign. Whilst the campaign ran between 1982 and 2008, the group somewhat faded into the millennium, with little activity beyond 2000 other than the campaign name appearing in the cycling stakeholder forum. After 2008 members who had previously represented Tynebikes at the cycling stakeholder forum continued to attend but no longer utilised the campaigns name and instead associated themselves to the CTC, of which they were members of throughout their time at Tynebikes.

It wasn't until 2010 that another cycling campaign formed. Newcastle Cycling Campaign has consistently lobbied for safe separated cycling infrastructure. During the re-emergence of a cycling campaign, a number of critical mass rides also took place. Whilst the rides were successful at first with 20-40 riders attending generally on a Friday night around 5:30pm every month, they somewhat tailed off due to low

numbers. The rides went into 'hibernation' for a number of years before sporadically returning between 2014 and 2015 with a few individuals turning out for the rides before stopping again for the foreseeable future due to the low numbers of people turning out.

Originally formed by two stakeholders who individually lobbied for better cycling and transport infrastructure, Newcastle Cycling Campaign (also referred to as 'Newcycling') now has more than 1,600 members. The campaign emphasises the power and responsibility of Newcastle City Council in enabling a growth in cycling practices and as a result focuses its attention on the local authority providing safe cycling infrastructure rather than engaging with local public and advocating them to take up cycling. Committee members perceive themselves to represent their members on behalf of the campaign when lobbying the council. The campaigns constitution enables them to submit letters and comments to consultation plans as a group on behalf of its members. As a result, the campaign regularly comments on representing its 1,625 members. This emphasises the campaigns prioritisation as a 'council facing' group over that of a 'user facing' group in where they perceive to see where the greatest chance of benefiting cycling practices lie.

During this time, SPACE for Gosforth formed in a residential inner urban area just north of the city centre, which has its own amenities and high street. Primarily created by members of Newcastle Cycling Campaign throughout the course of 2015, the group was first conceptualised at a Newcycling Annual General Meeting. With over 458 current members/supporters online (Facebook, 2018), it is acknowledged that a large proportion behind Newcycling or other groups such as the Green Party would join due to their active involvement in campaigning for similar issues (SPACE for Gosforth, S1).

SPACE for Gosforth's aim is to "promote healthy, liveable, accessible and safe neighbourhoods" (SPACE for Gosforth, 2017). Furthermore, the group was established to 'win over public opinion' and rebut general misconceptions of cycling and stigma associated to the practice (SPACE for Gosforth, S1). The group was established as a result of the heavy criticism placed on a large infrastructure project that was planned for Gosforth high-street in which an opposing campaign 'Stop The

Unnecessary Red Route' criticised the plans which included amongst them cycle provision and the removal of on street parking. SPACE pre-empts arguments, providing articles and research that would: refer to the benefits of cycling both economically and in relation to health; provide information that counteracts contentious issues such as the economic impacts on businesses when removing nearby car parking spaces; drawing to attention the issue of air quality both in Gosforth and Newcastle; as well as aspects of safety in relation to both walking and cycling (SPACE for Gosforth, S1; SPACE for Gosforth, S2).

Like Newcycling, SPACE supports cycling and pedestrian based campaigns including Living Streets national campaign and the national 'Space for Cycling Campaign'. Yet whilst being involved with, or members of the Newcycling previously, the formation of a separate entity was seen as an important step to emphasise the group's broad remit beyond just cycling improvements:

> "It's not Gosforth Cycling, it's a nicer environment for everyone, it's a
> safer environment for everyone and particularly it's for those who cycle
> and those who walk." (SPACE for Gosforth, S1)

Their approach also differs to that of Newcycling with members commenting that rather than campaigning to the local council in a confrontational style and politicising the issue, SPACE attempt to engage with the local people and businesses. By providing information and justification and being less confrontational SPACE for Gosforth attempt to understand issues from everyone's perspectives, be it the visually impaired, political parties, engineers or council policy perspective in order to provide better information back (SPACE for Gosforth, S1; SPACE for Gosforth, S2). This can somewhat mirror Furness's (2010) radical flank effect in Newcastle, whereby Newcycling's radical and confrontational style of campaigning makes SPACE more attractive in interacting with. This is reflected with one member commenting how local council officers encouraged their support and involvement in working with them in order to assist the council in pushing things through, albeit they "probably won't meet the minimum standards" Newcycling would have set (SPACE for Gosforth, S1). As a result, the idea of being a 'campaign' is used by some stakeholders but rejected by others, with the use of being a 'residents group' or a 'local community group'

143

preferred (SPACE for Gosforth, S1; SPACE for Gosforth, S2; SPACE for Gosforth, S3). Subsequently SPACE for Heaton and SPACE for Jesmond groups have been formed in two other inner city suburbs of Newcastle.

5.5   Cycling Clubs and Runs

Like any other city, Newcastle has a number of cycling clubs. Sport cycling clubs generally formed around local communities such as: electricians from the Swan Hunter Shipyard forming 'The Tyne Electric'; 'The Westend' being members of the Westend Boys Club; or 'Barnesbury Cycling Club', named after Barnesbury Road in Walker where riders would meet on the corner. Other cycling clubs such as Gosforth Road Club, established in 1951, formed as a result of the strength and depth of these sport cycling clubs in Newcastle, splitting off from another existing road club Ridley Cycling Club in order to have more chances to race in local competitions. Sport cycling in Newcastle was considered as an area that produced a number of strong cyclists:

> "In those days you had road racing where police only allowed fields of 40 riders so and there was, in those days in the 60s there was a lot of competitive cyclists about who wanted to race so organisers were only allowed to or only allowed you to have teams of four from each club… And in those days, whether it was because the terrain up here, a whole raft of reasons, but we had probably the strongest area, the regions strongest division in the whole of the UK. I mean, when I start to race in 63 the whole of the England A team and five of the B team came from the North-east. You'd go out as a 15/16 year old kid and you'd be riding with guys who are going to ride the Tour de France." (Gosforth Road Club, S1)

Beyond cycling for sport, clubs such as 'Newcastle Outdoors Activities Club' provide group riding and cycle touring throughout Northumberland. The group provides three different paces to the rides: medium, medium +, and fast. The fact that none of the groups were labelled as 'slow' indicates that whilst a leisure cycling group, the pace set still required a good level of physical ability. Rides varied with winter months including mountain biking and off-road/waggonways rides, whilst the spring, summer and autumn involved road rides primarily out into the Northumberland countryside.

Individuals also formed more informal groups where retired members would meet and cycle throughout the week, outside of the normal weekly ride. The group mainly kept touch through a mailing list which involved informing members of upcoming rides; trip reviews by members who volunteered to write one (including a long tradition of rating the pub stopped at and rating its chips); and also advertising other cycle touring and camping plans for others to join.

5.6   Cycling Businesses

Like many cities, Newcastle has a broad variety of cycle businesses and shops, both national chain cycle shops and independent businesses. In particular, M. Steel Cycles, a well-known and well respected local cycle shop in Gosforth. Owned by former cycling Olympian Joe Waugh, the business originally started trading in 1894[9]. Since 2012 however, a couple of businesses have emerged that combine a number of cycle business aspects to form entities known as 'cycle hubs'. Two in particular in Newcastle include The Cycle Hub, opened in 2012 and latterly The Journey, opened in 2015.

The Cycle Hub is a social enterprise formed by a partnership of two other local businesses: Saddle Skedaddle, a cycling holiday company; and Cycle Centre, a local cycling shop in Byker which sales and repairs bicycles. Opened in 2012, The Cycle Hub sits on the quayside of the River Tyne, approximately 1.5 miles southeast of the city centre. The Hub provides a number of services including: office space, primarily to other cycle organisations; a café; bike hire service for the local public; the 'bike library', a service which provide bicycles to city council departments for various council funded projects; a bike shop that sells various clothing and accessories; a bike repair and maintenance service; a number of British Cycling social rides; and cycle information through the form of event listings, advertising rides, routes and maps.

Prior 2012, it was noted by a number of stakeholders of a previous cycle hub 'Tyne Bridge Bike Hire' which was located in the Guildhall on the River Tyne. It was commented that Tyne Bridge Bike Hire started off around the same time as Recyke Y'Bike in 2006 (this is evident with the owner attending a number of the Cycling

---

[9] M. Steel Cycles closed in late 2017, shortly after data collection had been completed.

Stakeholder Meetings at this time) but it was perceived to be more of an ordinary café that also hired out bicycles. It was however generally unknown how long this business lasted for (Recyke Y'Bike, S1; The Cycle Hub, S1). Newcastle also reflects the growing interest in dockless bike sharing services many cities are currently experiencing with Mobike launching in late 2017. Originally launched in the city centre, it has subsequently expanded into nearby suburbs of Gosforth and North Tyneside during its first few months. Mobike isn't however Newcastle's first cycle sharing service. Between 2011 and 2014 Scratch Bikes provided a bike hire scheme originally for students and university staff at Newcastle University before being expanded to service the city centre and various inner city suburbs. Created by two Newcastle University students, Scratch Bikes has since folded but a number of bikes can still be seen around Newcastle after being sold off.

Similar to The Cycle Hub and billed as Newcastle's 'Active Travel Centre', The Journey was part of Newcastle City Council's successful CCAF1 bid to create a cycling hub in the city centre. Opened in 2015, The Journey is situated adjacent to Newcastle's flagship section of cycling infrastructure on John Dobson Street (500 metre, north-south bi-directional cycleway). Its role is to be the 'one-stop-shop' which promotes cycling as an 'enjoyable, safe and healthy form of transport' (Newcastle City Council, 2013, p.28).

The Journey provides: bicycle repair and maintenance; sells second hand bicycles; access to showering facilities; has a coffee shop which also provides themed food nights; provides a large capacity of cycle parking (uncovered Sheffield stands); as well as providing an extensive range of cycle information including current cycling infrastructure developments as part of CCAF1 and CCAF2 investment grants. Recyke Y'Bike's involvement in this includes running the bicycle repair and maintenance section whilst also utilising the space as its city centre shop to sell its refurbished bicycles, particularly the more expensive and exceptional bikes. As part of the CCAF1 funding bid The Journey provides 'public-facing' interaction from the city council, acting as the base for the "city-wide promotion and community outreach work" it does (Newcastle City Council, 2013, p.28).

A previous stakeholder of Tynebikes created Recyke Y'Bike in 2006, a local charity that accepted donated bikes, before re-servicing and refurbishing them and selling them on at a low and affordable price. Formed by a husband and wife team who were keen 'recyclers' and recycle campaigners, Recyke Y'Bike was not just about getting people to cycle through the provision of a cheaper alternative of bicycles, but it had strong connections to removing unnecessary wastage that generally went to landfill when such bicycles were still in a useable condition.

Recyke Y'Bike's main administration and workshop is based in Byker within the railway arches under the east coast railway main line. Since 2015 however they have expanded with 'satellite operations in both Durham and the centre of Newcastle' (see The Journey), which are "a bit more user friendly and a bit more welcoming" (Recyke Y'Bike, S2). The charity relies heavily on the volunteering of around 40 individuals in order to strip bicycles, refurbish and re-sell back to the public (Recyke Y'Bike, S2). This opportunity is aimed at everyone and open to anyone, with particular awareness of families and women as well as encouraging people who may feel isolated including asylum seekers, refugees, and the unemployed to invest their time and energy into a productive means whilst also developing social interaction skills (Recyke Y'Bike S1; Recyke Y'Bike, S2). It is highlighted that many volunteers have a form of special needs, are unemployed, or have either mental health or physical health problems and thus Recyke provides an alternate working environment to be a part of (Recyke Y'Bike, S2).

The process of recycling bicycles involves volunteers stripping the bicycles of useless parts, cleaning and tidying the bicycle so that the mechanics (paid staff) can commence checking and constructing the bicycles so that they are fit for the road and to re-sell (Recyke Y'Bike, S2). Parts no longer of use maybe recycled such as the metal, whilst usable components would be kept and used again on other bicycles or sold separately in their shops. A number of bicycles are also donated to development projects in Kenya and The Gambia.

Recyke Y'Bike stakeholders identify that these bikes provide a cheaper alternative to bike shops, which generally sell high-end bicycles, and are aimed at particular groups of 'cyclists'. Recyke Y'Bike therefore perceives itself to be an important charity

which provides access to and maintenance of cycling performances by individuals who may otherwise find it: economically challenging; put off by a perceived stigma of individuals who wear lycra; or who would feel 'uncomfortable' in bikes shop (Recyke Y'Bike, S2). Recyke Y'Bike identify however, that they are one of a number important organisations in pushing cycling onwards. They identify that whilst they don't lobby for infrastructure, organise bike rides, or run a cycle café, what they do provide is the device that is affordable and safe which enables people to carry out those activities or engage in those spaces (Recyke Y'Bike, S2).

5.7   Cycling Events

Newcastle is one of 14 cities in which British Cycling host a yearly Cycle City Ride in partnership with Newcastle City Council and funding partner HSBC (previously Sky). Originally, this event was held along the Quayside of the River Tyne but the 2017 edition was the first year that the social ride route was in the city centre. The family friendly ride cordons off roads that would otherwise be shared with motor traffic in order to provide a day of traffic-free cycling through the city to encourage people to get cycling and help build confidence. Comprised of an 8.5km circuit, various sections of the route included fun activities such as 'toot your horn zone', 'Sir Chris Hoy speed challenge', 'bubble tunnel' and a hub with further cycling and active sport games aimed at children.

Another cycle event bespoke to Newcastle includes the 'Cyclone Festival of Cycling'. Created by a stakeholder at Gosforth Road Club in 2007, the cycling festival is a multi-ride, multi-ride cycling event, which has hosted more than 33,000 riders since its inception. The event combines: leisure rides similar to those held by The Cycle Hub, which start and finish at The Hub and are over a distance of approximately 10 and 15 miles; challenge rides, which utilise the Northumbrian countryside and are over a number of distances of 34, 64, 90 and 106 miles; and finally both elite women's road race for the Curlew Cup and the elite men's road race for the Beaumont Trophy. On two occasions, 2011 and 2018, the Cyclone Festival has been of national cycling significance in being selected for the British National Road Race Championships, which incorporates both the British national road race and British national time trial race.

5.8   Conclusion

Whilst cycling levels in Newcastle maybe slightly lower than the national average and therefore conceived as lacking a cycling culture, it nonetheless provides evidence of numerous cycling social sites that contribute to a variety of cycling performances throughout the city and local area. It is evident that there has been a large increase of cycling sites throughout the 21st century, with Figure 5-7 conveying the most significant social sites in Newcastle's cycling landscape. The proliferation of such cycling social sites also draws to attention to the growing diversity, relationship and services to cycling. Tynebikes, The Cycle Hub, and Newcastle Cycling Campaign provide three social sites of particular interest in relation to the research questions. These three social sites provide both historical and contemporary importance of conceptualising cycling practices in distinct ways, establishing and envisaging particular trajectories of cycling in Newcastle.

Social Sites	Years Active	1975	1980	1985	1990	1995	2000	2005	2010	2015
Cycling Reports, Policies and Strategies	Various									
Tynebikes	1982-2008†									
Newcastle Cycling Stakeholders Forum	2002-Present*									
Recyke Y'Bike	2006-Present									
Newcastle Cycling Campaign	2010-Present									
The Cycle Hub	2012-Present									
The Journey	2015-Present									
SPACE for Gosforth	2015-Present									

† Shaded area indicates lack of activity
beyond 2000.
* Shaded area indicates Newcastle
Stakeholder Forum being formed at some
point during the late 1990s.

Figure 5-7 Key cycling social sites in Newcastle.

150

6 Tynebikes – Bicycle Advocacy and Campaigning in the Twentieth Century

As a cycling campaign group Tynebikes emphasise two particular approaches to the development and growth of a cycling culture within Newcastle throughout the 1980s and 1990s. Firstly, the campaign acted as a promotional group whereby social events, namely a variety of organised recreational rides, placed an emphasis on engaging with individuals not yet cycling to take up cycling as well as enabling others to maintain the practice of cycling through their attendance. These social events also promoted participants to engage with a more political arm of the organisation. This second approach was less about cycling advocacy and more focused on cycling activism, to campaign for the improvement of cycling infrastructure principally in order to tackle road danger. However, whilst Tynebikes campaigned for the supply of new cycle specific 'materials', these were largely countered by local government wanting to see demand prior to investment.

The first part of the chapter provides a short historical introduction to Tynebikes, establishing key dates and activities held by the group. The second section explores the meanings Tynebikes associated to the practice of cycling. Their use of leisure rides into the countryside and reporting back on such excursions, describing their experiences, relates significantly to performances of cycle touring. Whilst this provided a physical and spiritual escape from a predominantly motorised city environment, it was also perceived this would enable performances to move from the countryside into the city.

Section three explores Tynebikes campaigning approach. Throughout the 1980s and 1990s it was evident that Tynebikes campaigning relied heavily on legitimising cycling and keeping debates of cycling development on the council's agenda. In order to do so, Tynebikes approach was heavily focused on representing existing cyclists, making it that little bit easier and convenient for existing performances to be maintained and preserved.

This is expanded upon further in section four with material infrastructure campaigned for and perceived necessary focused on enabling existing performances of cycling. Two distinct periods of campaigning can be identified: the 1980s focused on improving dangerous road intersections by transferring cycling to the footway and sharing pedestrian space; whilst the 1990s attempted to reassert cycling's place on the road, acknowledging that too much of the

city space was being attributed to motor vehicles. However, such infrastructure generally related to light touch measures such as intersection alterations, painted cycle lanes, and dropped curbs, which arguably did very little to existing performances of cycling. Finally, section four draws to attention the lack of a network plan. The lack of a clear and consistent standard of cycling materials and the incremental nature of interventions contributed to a campaigning practice, which failed to suitably construct a consistent cycle environment throughout Newcastle.

Finally, section five evaluates Tynebikes knowledge sharing. Their rides, meetings and newsletters attempted to share and distribute knowledge among members and build a community of practice (Wenger, 1999). Such a repertoire referred to vehicular cycling performances; providing advice on suitable bicycle products to purchase; circulation of knowledge in getting the best performances from the bicycle; and finally the contribution of hand drawn cycle routes and development of a local cycle map in sharing localised knowledge.

6.1   Historical Introduction

Established in November 1982, Tynebikes – the campaign for cycling facilities in Tyneside (Tynebikes, 1982), took "an active interest in the development of urban cycling in Tyneside" (Tynebikes, 1982) as a result of an institutional gap resulting from the neglect of existing environmental and pro-cycling groups such as Friends of the Earth and the Cyclists Touring Club (known as Cycling UK since 2016). In its early formation, more than 40 people attended meetings whilst membership generally stood between 100 and 200 people (Tynebikes, 1991a, p.16; Tynebikes, S2). The majority of these individuals were originally from either Friends of the Earth or the CTC (Tynebikes, 1982). Their first priority was to lobby specifically for the provision of cycling facilities across the River Tyne using a number of existing road bridges (*ibid*). Whilst the issue of a suitable road crossing remained a key theme for the group in its early stages, the group developed a wider focus on urban cycling facilities lobbying for particular provisions for cycling across the Tyne and Wear region (in particular Newcastle, Gateshead and North Tyneside) and on other transport infrastructure (the local Metro service and national rail service). This latterly focused on key 'gateways' into the city, which predominantly had to negotiate the Central Motorway, either under or over it, arguing for the cyclists needs to be prioritised in the future.

The group also developed beyond a focus on campaigning through a variety of activities and events. Predominantly Tynebikes focused on the provision of different types of cycle runs, including weekend rides, family runs, and Mountain Biking; organisation of a number of 'cycle processions'; and meetings which covered a wide range of 'competencies' of cycling, including demonstrations of cycle maintenance and discussion evenings regarding road safety. Tynebikes also published and a newsletter 'Tynebikes News' (1983-1995) and 'Tyne Biking' (1996-1997), generally on a quarterly basis. Whilst this advertised their activities, it also included contributions by individuals on cycle routes and trips in the local area, distribution of knowledge on what to consider when selecting a bike or particular accessories, as well as key tips to remember when maintaining a bike.

Whilst the campaign ran between 1982 and 2008, the group somewhat faded into the millennium, with little activity beyond 2000 other than the campaign name appearing in the Cycling Stakeholder Forum.

6.2   Meanings of Cycling - The Outdoor Movement

Tynebikes use of 'leisure rides' including easy rides/social rides, Sunday rides, family bike rides, and mountain bike ride draws similarities to the outdoor movement of the pre-war period. Generally involving rides of a maximum of twenty-five miles into the countryside, these emphasised "enjoyable day's cycling, at a reasonable pace, with several stops along the way for rests and refreshments" (Tynebikes, 1983a, p.1). It was acknowledged that these were juxtaposed to the more serious 'head down and thrash it' cycling. These rides were generally aimed at those who wouldn't cope with longer rides of cycling clubs and organisations such as the CTC who generally held longer social rides.

> "I think we were doing this short ride during the summer on a Wednesday night… We might do 20/30 mile ride (*oh okay*) and again someone like the CTC they regularly do 50 mile rides, so we never aspired to that, it was for beginners to intermediate cyclists." (Tynebikes, S2)

> "Also starting from Grey's Monument at Ten o'clock on certain Sunday mornings are these rides intended mainly for those who feel they are less proficient or need to break themselves in gently!" (Tynebikes, 1990a, p.10)

The open-air leisure in England associated to the outdoor movement in the inter-war period formed a culture of landscape, which was encountered with a number of groups such as ramblers, scouts and guides, health campaigners, youth hostellers (Matless, 1998). Bicycling should also be considered alongside this. As Furness (2010, p.40) comments, during the 1880s and 1890s bicycling to the countryside was also a way in which to enjoy beauty and serenity of the natural world, 'improving his or her mind, health and morality'. Cycling therefore, along with these other practices in this respect were connected to the 'art of right living' and citizenship. The countryside provided a place for relaxation but also a chance for the exploration of historical sites and places of interest. The Tynebikes newsletter generally included a number of cycling excursion reports from its members describing their experience of these rides locally as well as cycle touring pieces from further afield (see Figure 6-1).

"10th June - caught the ferry from North Shields to Bergen (24 hrs). From the quayside a steady climb to the youth hostel halfway up Mount Ulriken. Then cycled inland via the Hardangerjord to Kramskogen and then Voss. The scenery on the way was typical postcard Norway with sheer granite cliffs, glassy lakes and snow-topped mountains… The next day I spent off the bike and went hiking with a group of Americans in the mountains above Voss. I took several other trips by bike around the area, a notable one being up the Raundalen Valley where the scenery is less harsh, with gently sloping forests rather than bare rock." (Tynebikes, 1985a, p.9)

"It [Cumbria Cycle Way] explores parts of Cumbria rarely visited by tourists. From the gentle countryside of the Eden Valley to the sea of the Solway Coastline; from the almost deserted Mallerstang Valley to the 20th century technology of Sellafield; cyclists will be fascinated by the contrasts in lifestyles, landscapes and history which Cumbria contains." (Tynebikes, 1989a, p.8)

"12 miles long with ponds, streams, fossils, a pony, peacocks, hens, grouse, rabbits and hares and frogs. The prairie (council owned), about 100 acres of it, empty, good for camping and with panoramic views of the Seaton Sluice beach and coastline." (Tynebikes, 1989a, p.11)

"The Waskerley Way follows the route of an early railway built in 1834 to carry iron, lead and limestone across from Weardale out to the coast. It passes through some of Derwentside's most picturesque countryside among moorland wildlife and heather." (Tynebikes, 1992a, p.6)

Figure 6-1 Excerpts of Tynebikes cycling reports.

Youth Hostels were significant to Tynebikes. Providing cheap overnight accommodation, they produced a particular moral environment where simplicity was emphasised and where comfort might detract (Matless, 1995). The Youth Hostel Association provided a network of hostels, utilised by Tynebikes with support for them encouraged through updates in the late 1980s to early 1990s of particular hostels under threat of closure in the Northeast. With a loss of nine hostels in the North England Region and up to thirty nationally primarily due to needing repairs, loss making and no longer in areas frequented by members (Tynebikes,

1989a), Tynebikes urged those who do their 'cycle touring' to stay at these places through articles of "Edmunbyers Youth Hostel Use It Or Lose It" (Tynebikes, 1991b, p.11). Whilst members also commented on the rejection of the Youth Hostel Associations 'neo-hotels' which led to threats of not renewing membership if this hostel was sold off (*ibid*).

Within the outdoor movement, outdoor education was learnt through the use of a map: "Maps are your charter to the countryside and its innermost recesses… You need not fear to become a map-slave; the chains are light, and lightly worn' (Batsford, 1945, 6:60 quoted in Matless, 1995, pp.94-96). Within the Tynebikes cycling excursion reports and experiences, they regularly included hand drawn maps and routes. These maps not only plotted the routes along particular roads, but also identified key locations and vistas. As Matless (1995, p.95) identifies "such delightful knowledge might seduce the reader, not away from sense and navigation but into a newly sensible world".

6.2.1   Escaping the Car

Leisure rides were considered stepping stones for those involved to get into cycling more regularly to encourage those:

> "Who haven't got out on their bikes, probably had a bike but never got out much
> so just trying to encourage to do that. And by doing that made them realise
> perhaps they could cycle to work as well as cycle out to the countryside during
> the week." (Tynebikes, S2)

Thus Tynebikes believed leisure cycling was a way into cycling more generally:

> "The argument is increasingly well accepted that if leisure provision for cyclists
> is improved, there will be a consequent increase in the use of bicycles in all
> contexts." (Tynebikes, 1983b, p.2)

Whilst during the inter-war period these spaces created a healthy escape from the grime of the industrial town (Furness, 2010), during the 1980s and 1990s this relationship between the city and the countryside evolved somewhat with countryside spaces providing an escape from the car and congested road spaces (see Figure 6-2). As Furness (2010) mentions though, the automobile provided a new medium in which to experience these existing cultural preferences, which were initially 'crystallised' through the bicycle. However, this was

somewhat rejected at the time. When the car was seen to encroach on this landscape, it was seen to undermine a Country Code:

> "A special… tone in different countryside's… the honk of the motor-car, the sound of the gramophone… do not enter into the chord: their dissonance is seriously felt and of singular pervasiveness." (Abercrombie, 1933, pp.243-4 quoted in Matless, 1995, p.88).

Whats On

NOTE. TyneBikes meetings are held in the Bridge Hotel at the north end of the High Level Bridge. 7.30pm.

All rides start from Greys Monument.

Sun Feb 14 RIDE. Short run to Marsden Grotto, meet 10.00am.
Sun Feb 21 RIDE. Short one to Riding Mill, meet 10.00am.
Sun Feb 28 RIDE. Short run to Mitford, meet 10.00am.
Sun Mar 6 RIDE. Short run to Washington, meet 10.00am.
Tue Mar 9 TyneBikes monthly meeting. Tell us what YOU think.
Sun Mar 13 RIDE. Short run to Stannington
Sun Mar 20 RIDE. Longer ride to Corbridge
Sun Mar 27 RIDE. Shortie to Seaton Sluice.
Sun Apr 3 RIDE. Longer run to Scots Gap.
Sun Apr 10 RIDE. Short ride to Stamfordham.
Tue Apr 12 TyneBikes monthly meeting followed by video.
Sun Apr 17 RIDE. Long ride to Hexham.
Tue Apr 19 COPY DATE. Get all copy for TB News in by today.
Sun Apr 24 RIDE. Short ride to Whalton.
Sun May 1 RIDE. Long ride to Amble.
Sun May 8 RIDE. Short ride to Chopwell.
Tue May 10 TyneBikes monthly meeting plus stuffing of TB News.
Have a natter in good company as you beaver away.
Sun May 15 RIDE. Long ride to Lanchester.

GO ON A TYNEBIKES SUNDAY RIDE AND GET AWAY FROM THIS.
(The traffic not Steve)

Figure 6-2 Tynebikes Sunday Rides, Escaping Traffic (Tynebikes, 1988, p.3).

Tynebikes too, identified this lack of synergy between the car and the countryside, arguing that the car destroyed the thing it attempts to associate itself with.

"Consider the commandment that says, 'Thou shalt have no other gods before me'. Our society is certainly not without its god. It's the Motor Car… Ads like these come at us all the time - in the Sunday papers, where one third of the advertising spaces are given to car ads and, of course, by the way of roadside posters. Have you noticed that many of the poster pictures also feature delightful aspects of the countryside and wildlife? How can the advertisers exhort people to buy a car on the attributes of wildlife and the natural environment which use of the car does so much to destroy?" (Tynebikes, 1991a, p.5)

Whilst the countryside was a geographical space in which bicyclists travelled in, Furness (2010) defines how the space was also produced through the act of cycling itself. The 'bicyclist's gaze' relates to this in which the act of cycling contributes to the atheistic conceptualisation of nature and the outdoors in which every turn of their bicycle crank contributed to the authenticity and preserving the natural experience itself.

"We had a lot of time to watch the changing scenery and had just passed a terrific view of a river emerging from peat sinks on the top of the valley wall and turning immediately into quite big falls. The falls had disappeared behind us after having rounded a bend in the road. There was still a good view of part of the valley to be seen and one of the few cars passing slowed down and pulled into a rut in the green verge worn by countless other cars doing the same manoeuvre. As we passed the driver jumped out of the car, blurted to his 3 passengers that no matter how many times he came along this road he never tired of the view, which was in his opinion the best he could ever wish to see. He then squeezed off 2 35mm frames of film jumped back into his car and flew off into the distance and round a bend. I looked at Ruth and Ruth looked at me and shrugged. We pushed another 50 yards to a far superior viewpoint laid our bikes against a rock outcrop and sat down for 20 minutes or so drinking in the beautiful view. Another 3 cars stopped in the rut and half a dozen photos were taken of the poorest view on the whole route." (Tynebikes, 1985b, p.13)

Here then we can see how those who drove were seen to lack a meaningful interaction with the landscape, which was enabled through the act of cycling to reveal nature and the landscape at its best.

Whilst Tynebikes admired the countryside and evidently used it for their benefit, they were not necessarily resistant to the modern world or anti-urban in relation to preservationists and planners (Matless, 1995). Neither did they frame these experiences to support a political agenda as in the case of the Clarion Club:

> "The frequent contrasts a cyclist gets between the beauties of nature and the dirty squalor of towns makes him more anxious than ever to *abolish the present system*." (Prynn, 1976, p.75 quoted in Furness, 2010, p.37)

Rather, like Aldred and Jungnickel (2012), these social rides enabled access to the pleasures of cycling which were difficult to realise cycling in a predominantly motorised environment, during the late twentieth century. Thus, the bicycle in this environment served to reveal the "possibilities of individual mobility to such a profound extent that it become an apt metaphor for independence and iconic signifier or freedom itself" (Furness, 2010, p.45). Something that Tynebikes attempted to convey through continual comments of cycling being 'fun', which was always contrasted ironically to a campaign voice of the safety issues of cycling in Newcastle.

6.3   Campaigning Approach

This part of the chapter introduces Tynebikes campaigning approach in order to understand what practice of cycling is campaigned for. Split into two sections, the first part refers to Tynebikes consistent attempts to legitimise cycling in the political arena. The difficulty in achieving cycle infrastructure developments was apparent with the campaign celebrating small interventions as large successes. Newcastle City Council's 'tolerate but do not encourage' approach to cycling meant Tynebikes had to vigorously justify the value of cycling. Who Tynebikes campaigned for was related heavily to existing cyclists or existing performances of cycling. This reflected the marginalisation of cycling in society. The campaign therefore catered for existing performances of cycling in the hope of making their performances somewhat easier.

6.3.1   Legitimising Cycling

Tynebikes original motivation for its inception was for safe cycling provision across the Tyne Bridges and much of its work that followed maintained this strong focus of providing cycling

infrastructure that would make cycling more visible to other road users, and more comfortable or generally convenient to cycle. At the time, any infrastructural improvements, no matter how small were celebrated as large wins for the campaign.

> "Some very encouraging news has been leaked to Tynebikes members at a monthly meeting… The present roundabout, which has encouraged grand prix type driving habits is to be replaced by traffic lights with *** a cycle phase built in *** … Newcastle City Council plan to build the scheme and give safe cycling provision, yahoo! But let us not sit on our laurels, let us extract maximum publicity for our efforts! If the ordinary everyday cyclist out there sees that we're being effective they will be encouraged to join the campaign and help us on to other successes in the future." (Tynebikes, 1989b, p.1)

> "Library cycle parking. We were told it couldn't be done!!! Tynebikes Campaign Group did it. There is a secure rail to lock up to at the Newcastle City Library." (Tynebikes, 1989a, p.1)

The provision of a cycle phase built into the traffic light system at a particular junction and a secure rail for cycle parking highlights the difficulty Tynebikes faced when lobbying for cycling infrastructure with Tyne and Wear County Council (1974-1986) and latterly Newcastle City Council (1986-Present). Local authority engagement with cycling demanded a need before any investment or development of infrastructure for cycling. Tynebikes assumed that the Council perceived the provision of cycling facilities adequate given the amount of people who cycled:

> "Perhaps some politicians might be forgiven, or at least understood for thinking that biking facilities seem quite adequate for the numbers of cyclists they see on the streets." (Tynebikes, 1990a, p.4)

The 1984 'Cycling in Newcastle – The Opportunities' document, presented at the 'An Approach to Cycling' event held by the Tyne and Wear County Council reflected this interpretation by Tynebikes of the County Councils position that cycling was only for a bespoke few. The document commented that although cycling was a cheap and independent form of transport, it was a transport mode for those who primarily could not drive a car due to being too young or old; and to those who didn't have access to a car, whether that was

because they were a non-car owner or because they were a the second driver in a one car household (Tyne and Wear County Council, 1984, p.2). The staging of the event and subsequent document can be traced to Tynebikes activism over the previous year, in particular, their criticism of the City Centre Local Plan (Tynebikes, 1983c) in which a Tynebikes information letter 'Cyclists Challenge City Planners' commented that the plan had "neglected cyclists and the need for better and safer cycling routes in the area". Notes for a phone-in programme on Radio Newcastle further outlined this stance commenting:

> "Main feature of plan is to provide a ring road for traffic, keeping centre traffic free. Welcome <u>but</u>, what about cyclists? Not allowed to use motorways. Ring road will be dangerous for cyclists unless provided with cycle lanes/tracks. <u>No</u> indication of thought on provision for cyclists in the overall plan." (Tynebikes, 1983d)

Tynebikes main concern therefore was more to do with 'omissions from the plan' (Tynebikes, 1983e). They accepted that a "proposed ring road will serve to route a lot more motor traffic outside the City Centre area and will make conditions in the Centre more conducive to cycling" (Tynebikes, 1983e, p.2) yet neglects any measures to support and allow cyclists access to the city. In response to their objection to the Local Plan, the campaign argued that "the points raised in objecting to the above Local Plan policies can be resolved without prejudicing the overall traffic management and movement proposals and without substantial additional expense" (Tynebikes, 1983e, p.3). Such a position resonates with work that show how the bicycle became an 'outmoded' practice of transport in the minds of transport planners throughout the 1950s and 1960s (Parsons and Vigar, 2018). Indeed, the campaign for safe cycling access on the Tyne Bridges escalated to the point in which the Executive Director of Engineering at Tyne and Wear County Council sent a letter commenting:

> "This is the fourth letter from [name] and other members of Tynebikes, that we have had on the subject of the Tyne Bridge since the end of April, and the seventh letter from the group this year… I consider that we are correct in this case. Whilst we all want to encourage cycling at present the *County resources must be directed to areas where there are real problems – actual accidents, actual traffic problems* etc… As it is, *two of the engineers in the department have been given*

special responsibility for looking after the interests of cyclists when they get time.
They can only fill in odd moments on this, [emphasis added] since they are also
involved in producing Urban Programme Schemes." (Tyne and Wear County
Council, 1983f)

The quote refers to the lack of significance cycling was given. Issues and accidents relating to
cycling were subordinate to 'real' accidents and traffic problems, with only 'odd moments' of
two engineer's time provided in looking after the interests of cyclists. This position on
cycling policy was evident some years later in Newcastle City Council's cycling policies. The
1991 'Cycling Policy and Plan' consulted both Tynebikes and the CTC, yet emphasised a
'tolerate but do not encourage' approach to cycling with policy going as far as advocating
against encouraging cycling and urged extreme caution over a 'get on your bike' policy
(Newcastle City Council, 1991, p.139).

"Cycling Policy 5.4. In turn, this leads to what may be considered to be the more
controversial conclusion in that in view of the present level of facilities provided,
it is <u>NOT</u> proposed to encourage significant growth in Citywide cycling."
(Newcastle City Council, 1991, p.143)

Such a view was supported on road safety grounds. The 'County Road Safety Officer'
attributed road safety issues to the lack of competence of some cyclists in which 'anyone can
ride a bike on the highway'; 'very few cyclists wear clothing or headgear which will provide
any protection in the event of a collision'; and the use of the bicycle as a toy by youngsters
(Tyne and Wear County Council, 1984). The resulting recommendations was that action
needed to be taken by cyclists through various interventions which emphasised cycle training
from a young age and for riders to protect themselves through learning 'defensive riding'
tips. To get any positive provision for cycling implemented was therefore a struggle. This
involved heavy lobbying through a continual effort of writing to local councillors requesting
specific provision of cycling in particular locations, which were on member's routes. Rather
than envisioning what cycling could be, the political environment at the time meant that
Tynebikes was having to vigorously justify every intervention and provide proof of its use
before further cycling development could happen. Rather than articles being informative of
cycle developments, these articles and messages were more of a call to utilise the newly

implemented infrastructure in order to legitimise the bicycle within the transport environment and to create further evidence of the need for these facilities.

> "[N]ext time you visit Felling Metro, Heworth Metro or the Trinity Centre you will find a cycle toast rack. Use them and show those councillors there is a need, these three facilities were due to persistent nagging by the Campaign group!" (Tynebikes, 1989a, p.1).

Cycling processions between Newcastle Civic Centre and Gateshead Old Town Hall were held to emphasise the numbers of cyclists on the road, adding to Tynebikes' attempts to make the case for cycling by visually displaying to councils that there was a demand for cycling facilities. The procession on the 30th April 1990 was considered a 'success with thirty-eight riders taking part', with further television airtime and press coverage adding to methods of evidencing a need for improved cycling facilities (Tynebikes, 1990b, p.5). Further evidence on providing proof of people cycling was to attempt to communicate with the council in their own language, statistics:

> "Government departments make all or most of their planning decision when there are some nice wholesome facts to base their decisions upon." (Tynebikes, 1990c, p.14)

Utilising the membership of the campaign, ideas of manually counting particular routes using similar traffic direction surveys used to count car and pedestrian traffic (Figure 6-3) would provide an evidence based approach for the campaign. Tynebikes identified the lack of cycling surveys and statistics with much of their own being based on national statistics and vague statistics related to Newcastle itself:

> "It is estimated that overall 5% of all trips are made by bicycle. We accept that due to topography this average will be lower in Newcastle. The best figures available suggest that 1.7% of trips in or out of Newcastle City Centre are made by bicycle. However, the nature of the cordon survey inevitably means that cyclists using footways and back lanes – as they are forced to do, to cross the urban motorway – are missed out of the statistics. This 1.7% may therefore be of the order of 2-2.5%" (Tynebikes, 1983e, p.1).

Indeed the County Council acknowledged in the 1984 'An Approach to Cycling' event that a lack of comprehensive statistics existed in relation to Newcastle and that the classified traffic counts undertaken by them could not have been taken as reliable indicators of cycling flows or trends (Tyne and Wear County Council, 1984, p.1). Therefore, Tynebikes saw a role in informing those at the Civic Centre of 'some useful and interesting bicycle facts' (Tynebikes, 1990c, p.14).

Figure 6-3 Tynebikes' Cycle Traffic Survey Example (Tynebikes, 1990c, p.14).

Achieving cycle growth through lobbying councils alone was not believed to be enough: numerous social rides and positive articles on the pleasure and health gains from cycling were seen to be helpful in getting new people riding. Although lobbying the council wouldn't stop, this alone would not increase cycling usage. It is apparent here that before further supply of cycling facilities, the County Council wished to see a larger demand, evident of their 'tolerate but do not encourage' stance towards cycling. Thus Tynebikes thought it was necessary to grow the cycling base further within the current climate in order to demand further cycling facilities.

"Even though our own current Campaign Sub-committee are being very busy and committed particularly at the moment with the planned parade of cyclists through Newcastle and Gateshead on Monday, April 30th, the talk and discussion aspect of the Tynebikes campaigning promises to go on indefinitely. So in the meantime, we as cyclists can also campaign to increase the NUMBERS of cyclists, whether they be commuters or leisure riders. If you have any encouraging articles to publish in the Newsletters, please send them in to... We need stuff that shows how much fun cycling can be, whether in the country, in the town or abroad. In fact we need to get as many people as possible to dig out, dust their machines, and get on them. We need to let those with the mechanical bent see that the practical side of cycling is enjoyable. Also, your articles can bring out the competitive spirit, accent fashionable trends or the funny side of the activity but above all, let us have articles looking at cycling from your angle even if it's not a particularly political one" (Tynebikes, 1990a, p.4).

An irony of this throughout the newsletters therefore was that whilst they were campaigning for better cycling facilities due to the issue of safety on the roads, they were also encouraging new individuals to join cycling citing meanings of it being 'fun' and 'enjoyable'. This was clearly paradoxical. The County Council/City Council considered the road environment as not safe for cycling, and would not promote cycling until safe infrastructure is built: yet, interactions with Tynebikes stated that they would need to see an increase of cycling usage across the city in order for them to justify spending on cycling. This can be described as somewhat of a stalemate in which Tynebikes was attempting to encourage people to cycle in an environment they identified as not safe in order to increase the demand for further cycling provision.

6.3.2   Campaigning for the Cyclist

As Aldred (2012c) has argued, cyclists remain stigmatised in the UK, whilst also identifying how cycling advocacy groups such as 'Londoners on Bikes' have attempted to create a non-stigmatised, inclusive cycling related identity (Aldred, 2013). In regards to Londoners on Bikes, the identity of 'cyclists' was replaced with identities of 'commuter' and being a 'Londoner', tapping into other identities. In comparison, Tynebikes from the outset advocated from the 'cyclists' perspective, campaigning for better access in Newcastle for the *cyclist*. As

Figure 6-4 portrays, Tynebikes was an organisation for *cyclists* and a campaign for all *cyclists, fast or slow* (Tynebikes, n.d.a), remarking that "Tynebikes is open to cyclists of all ages – you don't have to be an expert" (Tynebikes, n.d.b). Throughout Tynebikes' archival material the continual emphasis was upon the 'cyclist', the person who is currently engaged with the practice of riding a bicycle and therefore the performance of the practice:

> "Aims of Tynebikes: To represent cyclists interests in the region: to ensure that an overall plan for cycle routes is established." (Tynebikes, 1984a, p.1)

> "Without a clear long term policy for cyclists in the City Centre it is very difficult to take account of their needs… We recommend that a City Centre ring route for cyclists, together with perhaps two key routes across the central area be planned as a long term objective" (Tynebikes, 1983b, p.2)

> "Clearly there is a problem for cyclists getting into the City Centre legally over or under the motorway, and all the 'gateways' to the Central area should have priority in planning for cyclists' needs. Tynebikes has already submitted detailed proposals to Tyne and Wear County Council regarding the river crossings" (Tynebikes, 1983b, pp.1-2)
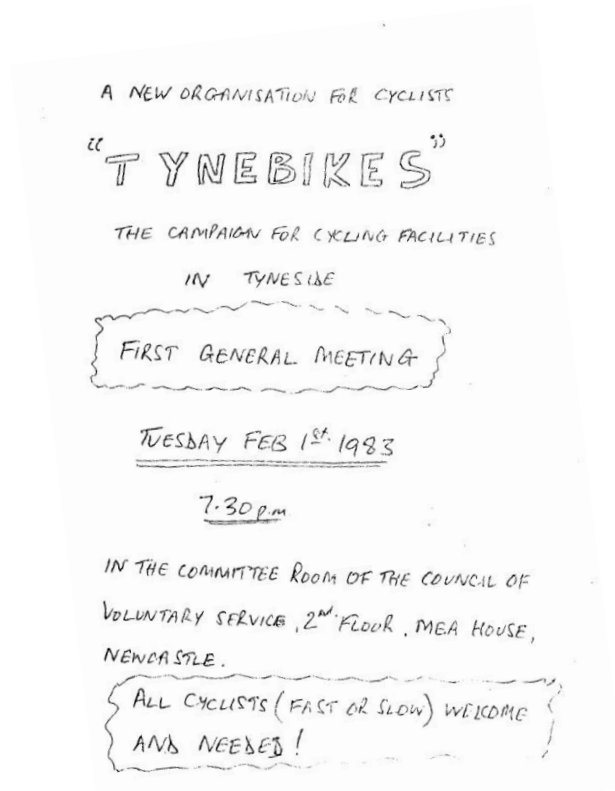
Figure 6-4 Flyer advertising first Tynebikes general meeting (Tynebikes, n.d.a.).

This inverted view of representing 'cyclists interests' accounting for 'their needs' and making cycling safer for 'us' conveys a sense of marginalisation of cyclists within society. However, it also expresses a predicament the campaign was in at the time in attempting to preserve the practice potentially from extinction. As Parsons and Vigar (2018) argue, automobile modernism created and endorsed a discourse in which cycling was to be seen as 'outmoded' within the urban environment. It can be argued then that Tynebikes was still attempting to battle against this storyline, attempting to maintain the existence of the practice.

As already acknowledged, the political response throughout this time was to tolerate but not to encourage cycling, with the councils response of wanting to see growth in cycle usage before subsequent investment was made for cycling infrastructure. Tynebikes emphasis and focus is therefore of protecting those who already cycle in the aim of preserving the practice held by the few and attempting to re-establish practices by potential carriers that may have recently stopped cycling as the following quote shows:

> "Tynebikes feel that Councils have a responsibility to consider the needs of
> cyclists. We believe that there are a great number of low cost measures which can

be taken which will both improve the safety and pleasure of existing cyclists and encourage the potential pleasure and utility cyclists to dust off their bikes and use them." (Tynebikes, 1983e, p.2)

The emphasis of an article 'Helping Cyclists in Newcastle' (Tynebikes, 1991b, p.1) draws to attention Tynebikes attempts in resolving issues members of the campaign faced in relation to their own cycling experiences. Awareness of particular hotspots and particular roads or junctions that caused issues to individual's journeys were identified as places where change was needed the most. By catering for 'cyclists' and those who may have recently been a carrier of the practice, Tynebikes were about making it that little easier or convenient for those already riding their bike in the face of the expansion of automobility and the car-system which was increasingly undermining the practice.

6.4   Infrastructural Materiality[10]

This section explores the role of material infrastructure in Tynebikes campaigning practice. Split into three sections; the first explores Tynebikes campaigning during the 1980s, advocating for bicycles to be allowed to use the footway, especially at busy road intersections. For Tynebikes, this avoided danger hotspots and improved the safety of cycling by enabling access away from the road network. Section two refers to a change in campaigning during the 1990s, advocating for cycling infrastructure to take space away from motor vehicles. Whilst this attempted to reassert cycling's place amongst the road network, it is argued that infrastructure deemed necessary by Tynebikes was somewhat consistent with existing infrastructure and relied heavily upon the use of vehicular cycling. What transpired was infrastructure that lacked any real physical separation to motor traffic, yet whilst these were seen to slow motor-traffic down, it did not inconvenience driving practices. Finally, section three acknowledges across these two decades, what was campaigned for was a somewhat incremental approach. As a result, this contributed to the lack of a consistent cycling environment. For example, whilst the idea of a cycle network was mentioned at certain points in time, definition and description of this network rarely materialised in a comprehensive form.

---

[10] Whilst the terminology 'footway' has been used throughout this research, Tynebikes has used the terms 'pavement' and 'footpath'. These should be taken to have identical meaning.

The establishment of Tynebikes was primarily related to an issue of safely crossing the Tyne on a number of its bridges. In relation to this issue it was originally campaigned for by Tynebikes to have the pedestrian footway on one side of the Tyne Bridge to be solely attributed for the use of cycling.

> "The Tyne Bridge - the eastern pedestrian pavement could be committed to cyclists separated from the road by a barrier… On the Gateshead side, cyclists could be directed by painted lines on the eastern portion of the pavement. High Level Bridge - The western pedestrian walkway could be committed to cyclists… Swing Bridge - The eastern pedestrian walkway could be committed to cyclists. New Redheugh Bridge - The only pavement, on the eastern side could be shared by cyclists and pedestrians. This route would only be suitable for southbound cyclists. The group is now waiting for the Council's reply before planning its next move. Watch this space!" (Tynebikes, 1983a, p.1)

> "After Tyne and Wear bowed to common sense and our arguments (albeit only for an experimental period) and created the unsegregated cycle tracks on the bridges, Newcastle City Council were asked to endorse the decision" (Tynebikes, 1985b, p.3)

This approach was attributed to the safety issue of sharing the road network with other motor vehicles, with the assumption that shared use with pedestrians being safer than shared use with motor vehicles. Referring to legislation in Scotland, Tynebikes argued the similarities of cycling and walking in that it provided a 'mechanical aid to walking', and whilst maintaining it didn't endanger others on the footway, this definition of cycling should be accepted in England due to dangers the road provides to cycling (Tynebikes, 1989c, p.5). It was generally assumed that there was a lack of special provision needed in that "where footpaths in new housing developments are built to link different housing estates (e.g. in Kingston Park) their value would be enhanced considerably if they were made into shared pedestrian and cycle paths" (Tynebikes, 1983b). Liaising with representatives of the blind and partially sighted groups, the campaign set about creating provision for cycling on the footway at points where they perceived the road-network to be its most dangerous. Aware of their impact on those who walk and those with visual disabilities, it was regarded that the physical division

169

between walking and cycling on the footway through either curbs or railings would be necessary (Tynebikes, 1983g, p.2). The Tyne and Wear branch of the National Federation of the Blind of the United Kingdom had "no objections to sharing the footpath with the cyclist, provided some form of physical barrier can be so placed as to separate the cyclist from the pedestrian – a dropped kirb (sic), a grass verge, or even a strip of pronounced textured paving" (National Federation of the Blind of the United Kingdom, 1984b).

Whilst this points to a potentially early premonition of campaigning for separated cycleways for the sole use of cycling, separated from both pedestrians and motor-traffic, the resulting outcomes were generally the displacement of cycling from the carriageway onto the footway with very little provision in the way of separating walking and cycling or providing suitable cycling provision. This contrasts with CTC's long held position at the time which opposed and resisted the removal of cycles from both urban and rural roads unless 'cycle lanes' of good construction and design (enabling the rider to ride continuously) were provided (Parsons and Vigar, 2018). However, the provision of purpose built cycling facilities such as this was perceived by Tynebikes to be too difficult to obtain in the current situation. Therefore it was evident that a cycle network was emerging where cycling on the road, with a number of interventions such as cycle lanes demarcated with paint and the provision of advance stop lines at major junctions, along with the competence and skills of the cyclist to mix with motor-traffic and become a vehicular cyclist were acceptable. Only when the environment was perceived to be too dangerous for cycling was the option of separating cycling with motor-traffic considered, commonly transferring the cyclist from the road to the footway:

> "At the other end of the scale, planning for cyclists may be seen as an extensive exercise in providing segregated, off-road cycleways. This is equally inappropriate as the majority of facilities for bicycles can be provided within the context of an existing road network, segregated routes only being used where they are absolutely necessary" (Tynebikes, 1983b, p.1)

> "On the north side of the Coast Road in North Tyneside between Wills Factory and Billy Mill Roundabout is the Coast Road Cycleway. The problem is that it is not a purpose designed track, merely a converted footway with absolutely no works done on it at all apart from the signing. The reason the County Council give is that given the resources they had at the time, it was a choice between

waiting an indefinite period and getting a pukka job meanwhile letting cyclists be killed and injured on the Coast Road, or doing the minimum which would at least allow those cyclists wishing to use the footway for safety reasons to do so without the threat of being banned by zealous policemen or having to suffer the abuse of the occasional crusader on behalf of pedestrian rights" (Tynebikes, 1985b, p.5)

'Cycling and Cycle Facilities in Newcastle Upon Tyne': "In May of this year, the Traffic and Road Safety Sub-Committee considered a report on Cycling and Cycle facilities in Newcastle and, as a result, authorised the Acting City Engineer to consult Tynebikes and the Cyclists Touring Club with a view to producing a package of proposals... The first is improvements to the oldest route along the east side of the Great North Road from Moorfield to Clayton Road. The route can be improved in three ways; (a) by the installation of improved facilities for crossing Jesmond Dene Road and Forsyth Road. (b) By converting the footway adjacent to the carriageway to shared use between Jesmond Dene Road and Clayton Road. (c) By extending the route from Clayton Road to Barras Bridge and Haymarket along the existing footpaths and footways by conversion to shared use. It is recognised that changing pathways to shared use might not be a popular thing; 'the changes'. It says in the report, 'may well prove contentious'."
(Tynebikes, 1989a, p.3)

Whilst the last quote here comments on the altering of pathways to shared use potentially being 'contentious' by the wider public, it was somewhat perceived to be accepted and even encouraged by Tynebikes. The fact of attempting to conjure up a word that would better define these pathways of shared use, somewhat argues that the provision of these facilities were acceptable and envisioned as being a common occurrence of cycling infrastructure in the future.

"As guardians of cycling interests we have to monitor local plans, proposals etc., and frequently we have to ask for clarification on cycle access to what are normally considered pedestrian facilities. The problem is that writers get tired of writing 'shared and pedestrian pedal cycle use', and frequently just write 'pedestrian'. This causes a lot of confusion, because what we know the writers mean is not what they write, and must be confusing to others… What is needed

is a simple collective noun for both cyclists and pedestrians, such as 'pedrads' (rad=German for cycling) or 'cyfoot' so that the traffic planner need only write 'cyfoot routes will be developed' or 'the paths will be restricted to pedrad use'" (Tynebikes, 1985a, p.18).

This sharing of facilities with pedestrians extended beyond the footway with parks and recreation spaces providing further spaces that took the bike away from the main road and were deemed to be safer than on the road. Yet both non-cyclists and existing cyclists at the time were perceived to be unaware of particular routes due to the lack of signposting (Evening Chronicle, 1983). This view continued in that an action which "can be been taken straightway" becoming a "tremendous value to cyclists" (Tynebikes, 1989a, p.3) was further access to parkland and park footways.

> "How? For a start we can write to the local Authorities, making the case and asking that the policy be changed. If by cycling through a park you can avoid nasty road conditions, say so. This will impress more than you may expect, especially if someone notes that perhaps x accidents a year could be avoided if everyone did it." (Tynebikes, 1985b, p.3)

> "Despite this, nothing to open up the Parks has been done. Why not? Most simply because the County Council has no say over what goes on in the Parks. That is a district council matter and Newcastle City Parks department has been traditionally hostile to the thought of cyclists enjoying themselves in areas maintained for the public good." (Tynebikes, 1985b, p.3)

By avoiding the road at certain points, particularly dangerous intersections where the safety of the rider was at risk, the campaign acted by advocating legitimate access to pedestrianised spaces. Rather than attempting to address the particular issue at hand in regards to the safety issue on the road network, it appeared that gaining access away from the road would better protect those cycling, something which dramatically changed throughout the 1990s in which addressing these hot spots and the general road environment came more into focus for the campaign.

6.4.2   1990s – The Bicycle on the Road and the Vehicular Cyclist

The emphasis of cycling on the footway and the avoidance of addressing particular safety issues somewhat subsidised from the 1990s onwards as an anti-car rhetoric approach questioned the legitimacy afforded to the car over other means of transportation, including the bicycle.

> "Personally I was amazed that Newcastle has the worst provision in Britain for cycle facilities, as we have such a socially caring Labour Council? I mean, look at all those extra car parking spaces it provides for those poor BMW drivers" (Tynebikes, 1993a, p.1)

> "In a CTC local survey 48% of cyclists said they don't cycle to work but would if it was safe to do so... Lack of money available is no excuse, it's what is done with that money that counts. If Newcastle doubled its annual safer cycling expenditure it would only cost them two indoor car parking places, 12 square of tarmac! Newcastle annually spends about £20 from each of us on roads but only 3 1/2p on cycle routes. One cycling injury, costs us each £6 in public and health service fees. Accidents to cyclists in the Netherlands are 1/10 of ours... A comprehensive cycle route network would only cost us the same as it costs other cities, - about the same cost as 200 yards of dual carriageway. Can we afford not to do it?... Anyone got any ideas for a (peaceful)* publicity grabbing demo? Each Town Hall in turn? Heckle a council meeting? What can we ALL do? *Dan's note - how about putting sugar in the petrol tanks of those XR3's in Grey St, that's what I call 'traffic calming'." (Tynebikes, 1993a, pp.5-8)

As a result of this change in discourse, Tynebikes became more critical and political in its argument for cycling provision. Their tone in campaigning argued that more sustainable practices of travel such as cycling, walking and public transport were rarely considered when implementing new road schemes (Tynebikes and CTC, 1995, p.3). As a result of this, cycling was 'inadequate' in being 'forced to mix it with other forms of traffic' when travelling across the city (Tynebikes, 1991b, p.9). The shift in the campaigns discourse in altering from a pro-footway policy to more of a reaffirmation of cycling provision on the road network is particularly apparent when the campaign criticised sharing the footway with pedestrians as suitable cycling provision.

"We must ensure together that future road schemes take account of cyclists needs fully and that we (i.e. pedestrians and cyclists) are not fobbed off with a 2 metre shared surface obstructed by bus shelters, traffic signals and other street furniture as at Cradlewell. We must get West Central Route right, followed by Scotswood Road and any other major schemes" (Tynebikes and CTC, 1995, p.3)

"The taking of space from pedestrians should be the last resort, not the first choice. Taking space from cars to create cycle routes should be the first choice. We acknowledge the huge problems in carving out such space in our tight urban areas, but this nettle really must be grasped. Mixed shared use with pedestrians such as that being implemented at Cradlewell will just cause a backlash (from cyclists as well as pedestrians)" (Tynebikes and CTC, 1995, p.4)

Whilst the 1980s advocated for the sharing of pedestrian space at particular spaces within the city, this sharing was now perceived to be a last resort and would cause 'backlash' from the cycling community. The separation of cycling and motor traffic was perceived to be backing down from the real issue at hand which was that too much space was being attributed to motor vehicles. Tynebikes criticised the Unitary Development Plan when it focused more on creation of an off-road route network with a lack of regard to the provision of on-road urban routes (Tynebikes, 1997a, p.7). Attention on cycling provision therefore turned to infrastructure provision and development that was situated within the motor-traffic network, enabling cycling by making the roads safer to cycle on. An example of this was the introduction of a number of advance stop lines and toucan crossings across Newcastle:

"Newcastle City Council has created advanced stop lines at five signalised junctions along John Dobson Street (parallel to Northumberland Street in the city centre), and on Shields Road. These are boxes created by moving back the stop line for cars by about three or four metres and creating a box into which cyclists can enter when the lights are at red. This gives cyclists a head start, especially when turning right, and also gets them away from the vehicle exhausts. In Newcastle the boxes are surfaced in bright green... And in another pioneering initiative, Newcastle has introduced its first toucan crossing at Jesmond Dene Road to link the relatively safe roads either side. A toucan is a shared pedestrian/cycle crossing, with the cyclists having their own little green bike light. Many crossings are used in this way by cyclists already, e.g. the crossing of

174

the Great North Road a couple of hundred yards from this one, so perhaps this is just the first of many to be converted" (Tynebikes, 1996a, p.2)

Further implementation of paint was used through the provision of 'coloured lanes' whereby paint was used to demarcate space for cycling on the road network, making cyclists more visible to motorists as a result (Pucher, Dill and Handy, 2010). As mentioned earlier, when Tynebikes were granted access to use the footways across the Tyne Bridge this was only verbal and did not stretch to physical and tangible infrastructure for cycling. It can be assumed here then that the campaigning for materials of cycling infrastructure during this period were a result of feeling completely marginalised from society where they had no provision for cycling, be it on the road when travelling or secure spaces when wanting to park their bikes.

"However it is pleasing to note the proposed use of advance stop lines on John Dobson Street. Mass provision such as this should really get the message home to drivers that cyclists exist... The overall message from us is that all traffic calming must be cycle friendly. Road humps must not be too severe or should have a cycle bypass. If vehicles are allowed over raised kerbs, there must be drops for cyclists…. Chicanes and other such devices must have a cycle gap at the side. Road closures must have gaps through for cyclists. And so on. There is no consistency at the moment as far as can be seen and there needs to be" (Tynebikes and CTC, 1995, p.3)

"The Council made good use of green paint in 1996. Advance stop lines appeared in John Dobson Street and on Shields Road, Byker, giving cyclists breathing space at junctions and letting them get ahead of traffic - especially useful when turning right… In terms of making cycling more visible, the paint has done a grand job in alerting motorists." (Tynebikes, 1997b, p.1)

As a result of Tynebikes focus on cycling provision relating to and advocating for advance stop lines, dropped curbs, painted cycle lanes, toucan crossings, gaps in chicanes for cycling, and use of bus lanes, much of the infrastructure provision related to what Pucher and Buehler (2009) define as 'intersection modifications'. In the case of dropped curbs and gaps in chicane, these relate more to minor traffic controls or traffic calming referred to in Pucher, Dill and Handy (2010, p.110) whereby these physical measures were implemented to reduce

175

negative effects of motor vehicle use but Tynebikes advocated these measures not to impede upon the practice of cycling. These interventions were seen to make cycling more visible and indicate to motorists that cycling does exist and happen upon the road network. This was to help the road environment be more cycle friendly with it arguably attempting to roll back the car-system and provision for motor vehicles. It was not only a rebalancing of the space and provision but also other equitable interventions in giving cyclists the head start they need at junctions removing them from dangerous cars fumes when waiting at junctions and intersections.

But it can be queried how 'safe' these infrastructure interventions were. The level of safety and the standards of the cycling infrastructure advocated for more generally refer to a 'vehicular cyclist' approach. The majority of the infrastructural advancements Tynebikes refer to relate to cycling that happen un-separated on the roadway network.

Tynebikes advocating towards a vehicular cycling stance therefore juxtaposes greatly to the previous decade of access to footways and the previous attempts to draw similarities of cycling to walking, whereby the bicycle provides a 'mechanical aid to walking' (Tynebikes, 1989c, p.5). Yet, whilst it is argued that many of the measures Tynebikes advocated for were akin to the vehicular cyclist model and were campaigned for the benefit of safer cycling practices, there were moments of inconsistency where Tynebikes were uncomfortable with the lack of safety that this model provided.

> "Cyclists are legitimate road users and bus lanes normally offer a much safer
> option than pushing cyclists out into the middle lane. However use of bus lanes is
> not the whole answer, as many cyclists feel intimidated by buses. It is therefore
> quite appropriate, indeed necessary, to look at traffic free or segregated provision
> in parallel." (Tynebikes and CTC, 1995, p.3)

This draws to attention Pucher and Buehler (2009) criticism of vehicular cycling and the subsequent emphasis on a cycling practice with little separation or no separation with motor vehicles whereby individuals are unwilling to 'do battle' with motor traffic, which is larger and heavier than them. As a result, Tynebikes advocated that separated cycle provision must be considered as the interaction with vehicles such as buses contributes to an environment that only suits those "who are trained, fit, and daring enough to navigate busy traffic on city

streets" (Pucher and Buehler, 2009, p.62). This undermines the practice for individuals who have mental and physical conditions that may limit their ability to negotiate motor traffic.

> "The slowed reflexes, frailty, and deteriorating eyesight and hearing of many
> elderly make them especially vulnerable. Limited experience and unpredictable
> movements put children at special risk on streets. Moreover, regardless of age,
> many people prefer to avoid the anxiety and tension of cycling in mixed traffic,
> aside from the safety hazards." (Pucher and Buehler, 2009, p.62)

Therefore, it can be seen that whilst Tynebikes advocated throughout the 1990s for infrastructural improvements on the road network, there were moments of inconsistency in which they advocated for separated infrastructure with motor-traffic. What regularly transpired however was infrastructure that lacked any real physical separation to motor traffic and aimed at rebalancing the car-system. Ultimately however, interventions generally benefitted cycling through the development of intersection modifications and were seen to slow motor-traffic down but not at the expense of inconveniencing it.

6.4.3   *Failure to Define a Cycle Network*

Whilst the 1980s primarily advocated a path based practice before turning over to a more militant and abrupt argument of the over compensation for motor-vehicles within the city in the 1990s, whereby cycle allocation should be on the road-way, these discourses lacked a long term vision in developing a cycle network of consistent infrastructure and instead revolved around incremental changes to the urban environment throughout.

In its formative years, Tynebikes did attempt to identify and establish what it meant when campaigning for provision. A special debate 'Segregated Cycleways - Help or Hazard?' (Tynebikes, 1983h) held by Tynebikes essentially revolved around what their campaign should campaign for. With both for and against arguments represented by Don Matthews, Friends of the Earth, London and Peter Lumley, editor of Bicycle Times respectively, it was concluded by the campaign "that there was a need for both segregation, in some danger spots, and education". Whilst Don Matthews did advocate "segregated facilities are especially needed at known danger spots, such as round-about, major junctions" it can be generally conceived that seperated facilities were only ever campaigned for at such hot spots and junctions. As a result, campaigned cycle provision included a mix of off-road and on-road

infrastructure including "cycleways, priority lanes for cyclists at difficult junctions and shared use of bus lanes" (Tynebikes, 1983h). Furthermore, Figure 6-5 refers to notes used for a phone in programme with Radio Newcastle in which Tynebikes attempted to identify what they meant by 'Provision for Cyclists'.

Cheap	Signposting cycle routes to avoid worst of traffic
	Use of bus lanes
	Shared use of some pedestrian ways (depending on width, weight of 'traffic', and the blind and handicapped)
	Cycle gates to bypass no entry signs (as in Percy St. already)
	Advance stop lines at traffic lights if cyclist turning right
	Cycle lanes
	Cycle phase in traffic lights
Expensive	Cycle tracks

Figure 6-5 Tynebikes definition of provision for Cyclists' (Tynebikes, 1983a).

Their claim of 'Provision for Cyclists' was reiterated vaguely throughout time with the quote below referring to a rare comment regarding a cycling network and the subsequent infrastructure that is required.

> "What Tynebikes Wants. Cyclists on Tyneside need a complete network of cycle routes, taking advantage of quiet back streets and waggonways and where appropriate, by creating special facilities on busier roads" (Tynebikes, 1995)

Whilst Tynebikes discusses 'a complete network of cycle routes', the actual visualisation and standards of it as an idealised completed design was rarely, if not at all mentioned. As a result it meant that cycling provision generally ebbed and flowed in what was provided, resorting to 'remedial' action to specific 'hot spots' or hazards (Tynebikes, 1984a). An article 'City by-pass route' by a member in the 1989 Tynebikes News magazine epitomises the resulting

material entities of cycling creating a somewhat unique cycle experience, potentially a result of these various cycling infrastructure developments:

> "The paved cycleway on the East side of the Tyne Bridge would be put to use much more often I'm sure if more people realised that it can be the start of a really safe and pleasant route totally bypassing the City. On reaching the Newcastle end of the bridge dismount and negotiate the five or six steps to the right... Bear right and dismount at the Multi-storey Car Park entrance. On your bike again and turn left and up the cobbles... Take care here crossing North but this is about your last real brush with city traffic... Get to the top and bear left and then dismount and look over the road. The short railway bridge has a break in the fencing at the far left corner. But look at the kerb - it's an actual entrance, and if you are riding an A.T.B then you can have some fun up the grassy rise... The grass is well kept here and easy to cycle over... Please note that it is still against the law to cycle on the pavement." (Tynebikes, 1989c, p.8)

Advertised as a safe and pleasant route which bypasses the city for cycling purposes includes a myriad of different material infrastructure in order to complete the route. Cycle specific provision includes a paved cycleway legally shared with pedestrians and on-road cycling whilst other environments include illegal use of riding on the footway; dismounting from the bike to negotiate steps and a multi-storey car park; searching for nooks and crannies and dropped curbs – signalling suitable access, and lastly traversing grass rises. The lack of a clear standard of cycling materials for this route in particular conveys the general lack of consistent cycling provision articulated by the Tynebikes campaign. This lack of consistency and vision of what cycling provisions were suitable (as well as the shear variety of cycle provision) was also noted when it was commented:

> "On March 8th, we will be inviting engineers and councillors from Newcastle City Council to come and discuss cycle facilities with us. From this we then need to discuss and clarify our position on Cycle Rights and Provision, to avoid conflicting messages that were put out to the West Central Route Public enquiry, we have to know WHAT we are CAMPAIGNING FOR & WHY?" (Tynebikes, 1994, p.2)

"Tynebikes suggested that the Council should have a policy of keeping certain routes across the city safe for bikes, providing cycling facilities at access points into the centre...We told the enquiry that cyclists in Newcastle need: special signs, shared use of bus lanes; cycle facilities at junctions; shared cycleways with special kerbs or barriers to safeguard the elderly, disabled or children; and safe cycle parking facilities located close to key routes" (Tynebikes, 1984a, p.2)

As a result of this potential lack of direction by the campaign as a whole, it can be argued that if a campaigner was cycling on the road and comfortable in being a 'vehicular cyclist', then the resulting measures and changes in relation to cycling provision would largely reflect their personal preference of cycling materials on the main road highway. This campaigning and lobbying for cycling infrastructure which reflected the preference of those who were interested in campaigning at the time is reflected when a former member commented:

"Urm coming back to Tynebikes, its, it's in terms of political campaigning if you like, it came and went, it just depended who was leading it and how militant if you like (*yeah*) they wanted to be." (Tynebikes, S2)

6.5   Tynebikes Community of Practice

Finally, this section acknowledges Tynebikes advocacy approach to cycling, which reflects a community of practice in which members contribute what they know and do to create meaningful connections with other members of the group (Wenger, 1999). Divided into four sections, the first explores the popularising of vehicular cycling, providing hints and tips in order to safely and to successfully negotiate general road situations. Section two refers to the circulation of particular standards and rules to be aware of when purchasing cycling accessorises, whilst section three refers to the circulation of in-depth expertise on getting the best out of member's bicycles. Finally, section four details the contribution of a number of hand drawn cycle routes for members to use whilst out on their weekend rides. At a time when cycle maps were not produced, Tynebikes eventually created a local cycle map for the Tyne and Wear area themselves. As a result, all four sections refer to a sense of community, contributing particular stories, knowledge, rules, and norms of cycling for members to use and perform in their own cycling performances.

6.5.1   *Successfully Cycling the Vehicular Cyclist Way*

Articles referred to how to navigate and negotiate particular moments when cycling. The 'sharing of repertoire' through the explanation of knowing-how to cycle in certain traffic situations contributed to a coherent community ideal of how to cycle. Particular instances of negotiating road layouts include 'Getting it right in a roundabout way', whilst particular sections of Newcastle's roads were also raised such as 'Scotswood Bridge' in how to navigate these:

> 'Getting it right in a roundabout way': "Anyone wishing to stay alive in these situations is well advised to avoid for as long as possible the chance of colliding with the motorist's blind spot, his left-hand side. If a cyclist keeps to the centre of a rotary system and proceeds with confidence, then he can be sure that his presence will be seen much more readily. Riding round the inside of a roundabout means that there is less distance to travel when turning right. When you come to your exit then you must indicate by sticking out your left arm. There is less to fear at this juncture than what there seems to be; the motorists behind are busy looking to the right as it is and you will be seen. Now is the time to cross each lane of the roundabout with an encouraging smile for the kind motorists behind and with a friendly wave to resume your journey safely down the road of your choice. Please note that it is better not to get upset by the sound of screeching tyres and any smell of scorched rubber. Remember that it is the car driver's duty to avoid you if you are in front. Closing the eye tightly as you signal the left turn can help but is not to be recommended." (Tynebikes, 1989d, p.14)

> 'Scotswood Bridge' "On arriving at the far side of the bridge it is merely a matter of carefully moving back to the normal position on the road having used hand signals or even stopping on the right to allow cars to pass first" (Tynebikes, 1989d, p.14)

This sharing of knowledge contributed to a vehicular cycling technique as outlined by Haake (2009, p.52). The principles of the vehicular cyclist's method whereby the bicycle rider is predictable, visible, assertive, obeys traffic laws, and maintains lane and intersection and communication with others is evident throughout these extracts. The cyclist remains *predictable* and *communicates* through 'sticking out your left arm' thus using hand signals;

visible by avoiding motorists blind spots and *positioning* themselves correctly so that they are in view of where motorists should be looking; *assertive* by keeping to the centre of the rotary system, therefore adopting a 'primary riding position'; and understanding and *obeying traffic laws* in knowing whose duty it is to avoid when travelling. This therefore provided members the competence in the written form of 'know-what' when negotiating the existing transport environment. This therefore assumed that members already had previous experience of similar situations in the form of 'know-how' in order to understand, de-code and figure the information into their own cycling performances (Royston, Daly and Foulds, 2014). Other articles reproduced rules in order to maintain that 'Tynebikers' were conversant with the highway code (Tynebikes, 1991a) whilst, with the promise of improved cycling infrastructure in and around the city in the following years, Tynebikes circulated traffic signs for cyclists in the format of a quiz, testing their knowledge of the law as a result (Tynebikes, 1984a).

6.5.2   The Cyclist Consumer

Further advice was provided when purchasing both bicycles and accessories for bicycles. When buying a bike it was advised to consider its use and requirements with larger wheeled bikes being the 'most efficient and adaptable' whilst small wheeled and folding bikes were suitable for short to medium distances (Tynebikes, 1991a). Selecting the correct size was roughly checked through being able to 'straddle the frame comfortably with your feet flat on the ground' whilst it was also important to consider whether the bike allowed for modifications such as adding shopping pannier bags (Tynebikes, 1991a). Advice was reproduced from other cycling magazines of the time such as 'London Cycling' from the London Cycling Campaign where the discussion revolved around cycling with older children and the value tandems, rann trailers/trailer bikes, tricycles and trailers in assisting with this (Tynebikes, 1993b), whilst other articles obtained information from manufactures in regards to their products such as children's bicycle seats in order to provide prior information to a range of cycling seat products (Tynebikes, 1985a).

Tynebikes also circulated particular standards and rules associated to cycling successfully through the review of cycling accessorises, advice on their suitability and the circulation of changes in law or best practice guidelines. Advice on cycling accessories such as bicycle helmets, children's cycling seats and bike themselves often referred to specific standards which justified the tool or devices worth. Taking care and buying bicycle helmets that were

passed by the 'Which test' and carried the British Standard Kitemark was important (Tynebikes, 1991a) whilst in the proceeding newsletter this information was expanded upon referring to specific standards and to be aware not to buy ones which were British Standard helmets but for toys and not "adequate protection for cycle riders" (Tynebikes, 1992b).

6.5.3   The Knowledgeable Mechanic

Whilst this was considered more general knowledge and reiterating standards for products, there also existed articles on how to get the best performance from the bicycle when cycling around Newcastle, with members writing in to provide their opinions and views on such topics. These contributions generally referred to particular mechanics of the bicycle, outlining an in-depth knowledge and understanding of the bicycle. A general lack of confidence in pre-made bicycles of 'rear cogs already made up into a block at the shop' (Tynebikes, 1992b) were criticised for being "cheap close-ratio ten speeds fitted by the bike makers of the Midlands Flatlands" (Tynebikes, 1989c) and therefore lacked the individuals particular needs whilst cycling around Newcastle. As a result articles referred to assembling gears specifically for Newcastle. Members wrote that even if cycling facilities were to be provided, there success would not been seen "until low gearing (below 35" or 36") is generally fitted to cycles" (Tynebikes, 1983a). The innovation of mountain bikes led to others commenting that the wide ratio mountain bike type gears were useful to climb over hills and that adding these to "your road bike" whilst also adding "a thirteen to thirty-two teeth freewheel block" would "double your ride's mileage without bother" (Tynebikes, 1989c). The article 'Better Pedal Power' questioned (see Figure 6-6):

> "How many times do you select the very highest gears? Possibly not all that often… Think of how many times around Tyneside you cycle along a level surface and with the wind behind you! Around here we use the lower gears for most of the time, so its logical to have a selection of low gears. For the amateur rider the block that you make up ought to appear a little bit like the diagram, looking over the cogs from behind" (Tynebikes, 1992b, p.2).
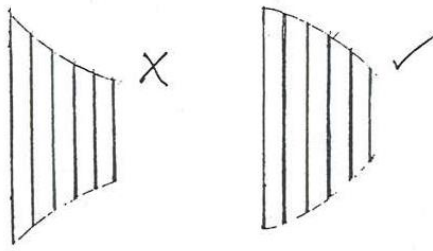
Figure 6-6 How a rear gear block should look (Tynebikes, 1992b, p.2).

This awareness of the 'amateur rider' was also reflected upon in the 1983 article 'Geared Up?' in that 'ultra low gearing' was envisioned to allow "beginners to adapt to cycling without the 'head down and thrash it' attitude of the sporting cyclist. Such low gearing not only copes with the area's hilly nature, but also allows the cyclist to maintain a steady leg rhythm (60-70 per minute)" (Tynebikes, 1983a). Whilst the 1983 article proposes approaching local cycle shops on the issue to provide prefigured gearing suitable for Newcastle, by 1989 and 1992 it was somewhat viewed that individuals would be able to create this themselves. Whilst these referred to the gears themselves, it was also raised that the maintenance of its performance relied on maintaining a good working chain. A regular contributor to the newsletter, including the 'Take Life Easier' article already discussed above (Tynebikes, 1989c), Charlie Hall also contributed to a 'Charlie Says…' advice style article infrequently. In relation to this one, it was commented that:

> "The smallest amount of wear in a rivet detectable by a fingernail is about 2 thousandths of an inch. When your chain bearings wear by this much over all 106 or so rivets, its length increases by about ¼ inch and its well on the way to the scrap heap… The links of a new chain spread the pedalling load over 5 or so teeth of a cog, but with a worn chain then only one tooth carries the whole load of pedalling, so the intermittent load on each tooth is five times the designed load and your sprockets and chain rings start to wear out faster. If you stand on your pedal going uphill, you might even get bent teeth on an alloy chain ring and if you try to straighten them they'll probably break off" (Tynebikes, 1990a).
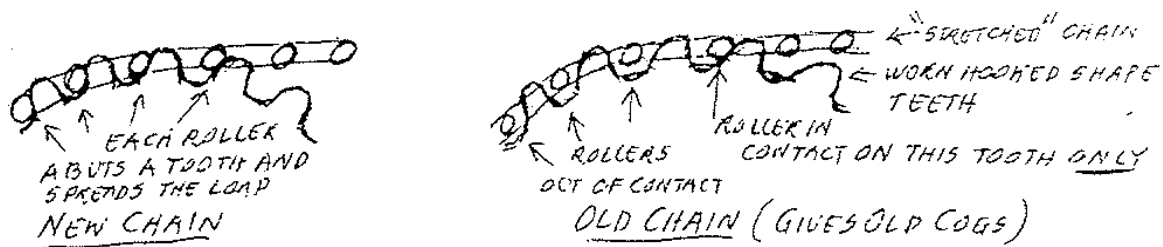
Figure 6-7 'Charlie Says…' Maintaining and good chain (Tynebikes, 1990a, p15).

In a further article 'Charlie Hall's Patent Derailleur Lubrication', he outlines how to make your own lubricants for the bicycle as a tool to maintaining its efficiency. Different mechanical parts are perceived to require different mixtures of oil, with a 'noisy freewheel' being silenced "with a mixture of 1 part castor oil to 1 part olive oil", whilst "if the gear pulleys stiffen up in cold weather, a few drops of olive oil will soon free them" (Tynebikes, 1985a, p.7). Further advice using particular tools to assist with this process involves the knowledge of a cloth would remove too much of the excess and therefore a knife being suitable or the use of an old toothbrush to brush the lubricant mixture on particular bike parts, including the sprockets and chain wheels (Tynebikes, 1985a). Throughout the course of the newsletter's history however other articles published similar advice yet with more explanation and less practical knowledge necessary. 'Yeeuch?' informs the reader the use of the chain as a mechanical piece on the bike before advocating the best way to lubricate a chain is to:

> "Dunk the whole chain when new into a solution of thinned-down grease (use turps substitute to make the solution.) Leave it for some time to soak in and wipe the chain absolutely clean on the outside as it's taken out. The turps will eventually evaporate leaving only the grease" (Tynebikes, 1990c).

6.5.4   Where to Cycle

Throughout the Newsletters between 1989-1994, a number of hand drawn maps of cycle routes were created and produced by Charlie Hall, a prominent figure who was also involved with a considerable production of the newsletter and other articles. Titles included 'Wilderness Wanderings' (Tynebikes, 1989a); 'Cross Fell to Cheviot (Tynebikes, 1990b); 'Grand Tour of the Famed Northumbrian Coal District (Tynebikes, 1990c; 1991b); ''The Tyne & Wear Circular (1991c; 1991a); 'The Three Rivers Ride (Tynebikes, 1992b); 'Kielder

Border Forest Park (Tynebikes, 1992a) and 'The North East Durham Grand Tour (Tynebikes, 1994). As Figure 6-8 conveys, these maps were drawn with intricate detail attempting to utilise the growing miles of 'Cycleways' developed by Sustrans at the time as well as footways and quiet roads. Prior to these being produced it was the aim of Charlie Hall to develop a 'comprehensive north and east of Newcastle' cycle map, and needed "YOUR local knowledge" for the benefit of 'city commuters and recreational bikers' (Tynebikes, 1989b, p.5). Whilst these maps produced in the newsletter were a 'device' (Shove, 2017) for members of the campaign to utilise and engage with, they were somewhat of a recreational nature, again linking into the discourse as outlined in Chapter 6.2. These maps acted as tools in which performances of cycling were viewed to be enhanced.
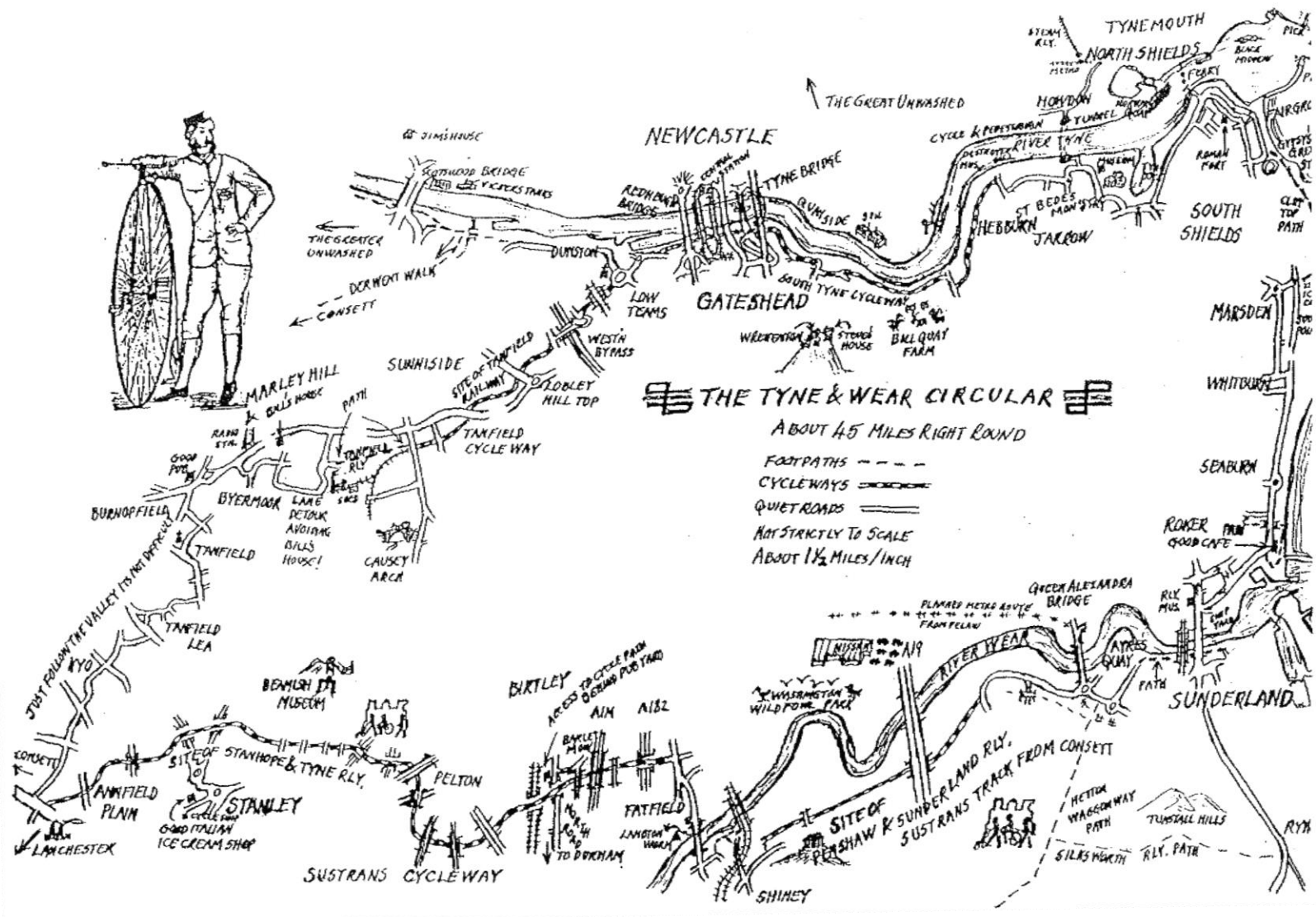
Figure 6-8 The Tyne & Wear Circular (Tynebikes, 1991c, p.6).

It was not until 1997 that a Tyneside Cycling Map was created, largely through the contribution of Tynebikes members and their cycling experiences which contributed to existing 'official' routes from local authorities (Figure 6-9). By this time, the organisation who published the map, 'Cycle City Guides', had already produced maps for Bristol, Oxford East Kent in which these were generally "produced with the active assistance of the relevant cycling campaigns" just like in the case of Tynebikes and Newcastle (Tynebikes, 1996b). It was argued that such cycle specific map would provide members, cyclists generally, and cycle tourists by ferry and train the help they needed in not getting lost as a result of the lack of information on cycle routes at the time (The Journal, 1997).
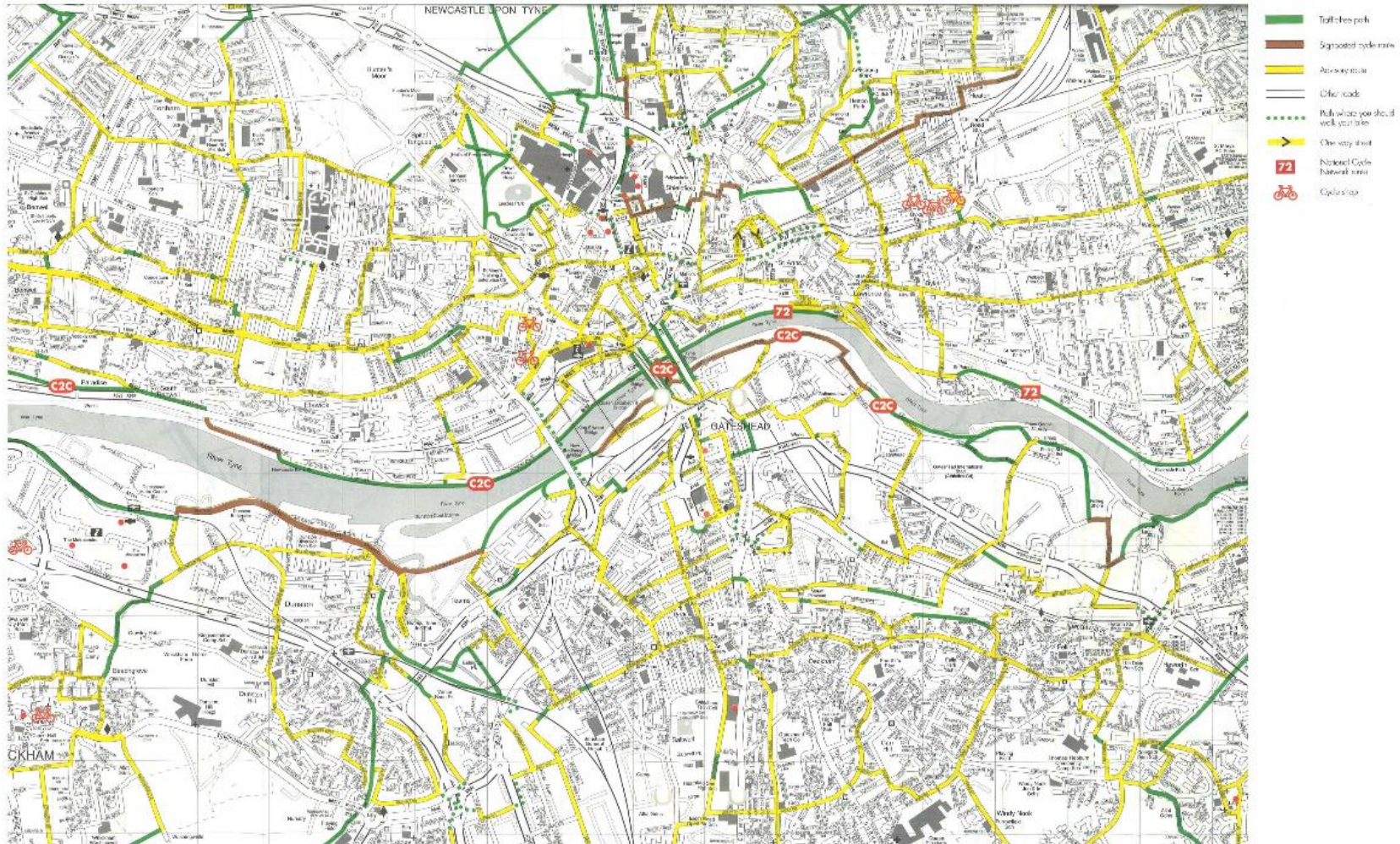
Figure 6-9 Extract of Tyneside Cycle Map produced by Tynebikes and Cycle City Guides (Tynebikes, 1997c).

6.6   Conclusion

In this chapter I have traced and assessed Tynebikes' contribution to cycling practices, referring to both their promotional and political approaches. Utilising the three-element model of practice theory (materials, meanings and competences), Tynebikes contributed to each element of cycling practice in particular ways.

As a group, Tynebikes engaged on an activist and political level. Tynebikes campaigned for the improvement of cycling infrastructure principally in order to tackle road danger. I defined two periods of campaigning for cycle developments on the footway throughout the 1980s and latterly for the provision of cycling materials on the roadway throughout the 1990s. Yet, the material infrastructure advocated for was heavily focused on representing existing 'cyclists', making it that little bit easier and convenient for existing performances to be maintained and preserved. Tynebikes' campaigning approach was largely countered by local government wanting to see bicycle demand prior to investment. As a result of the political environment Tynebikes had to legitimise cycling in order to maintain its presence on the council's agenda.

In regards to their promotional approach, I have argued that Tynebikes use of social events and organised recreational rides into the countryside related to the physical and spiritual escape from a predominantly motorised city environment. Social rides contributed to instilling meanings of fun and enjoyment, which related significantly to performances of cycle touring. Such rides enabled access to pleasures of cycling and thus attempted to instil positive meanings in the attempt of producing an uptake in city cycling practices.

And finally, Tynebikes' newsletter contributed to the development of competency based skills and knowledge culminating in and contributing to a community of practice of how to competently cycle. The sharing of repertoire in how to successfully manage road environments through vehicular cycling; knowing what bicycles and accessories to buy; understanding how to get the best performance from the bicycle in relation to reconfiguring gear blocks and making your own chain lubricant; and the sharing of local knowledge of routes to cycle, contributed to the skilling and learning of various competencies when performing cycling.

In conclusion, both Tynebikes promotional and political approaches culminated in both attempting to recruit new individuals to existing cycling practices whilst also helping

maintain existing cycling practices. Throughout this chapter I have argued that Tynebikes contribute to cycling cultures through the recruitment and enrolling of new individuals, whilst also attempting to cater for those already cycling by making performances somewhat easier. Chapter 9 expands upon this when formulating an understanding of how cycling social sites contribute to trajectories of cycling practice.

7   Newcastle Cycling Campaign – Bicycle Lobbying for Separated Infrastructure

This chapter introduces the second of the three social sites, Newcastle Cycling Campaign. I focus particularly on Newcycling's politicisation of cycling and the campaign for a safe, separated cycle network. I will argue that rather than contributing to existing performances of cycling, Newcycling are focused on the alteration of cycling performances and therefore are subsequently engaged at a practice-as-entity level.

The first part of the chapter provides a short historical introduction to Newcastle Cycling Campaign, establishing the formation, goals and aims of the social site. The second section explores meanings the campaign ascribed to the practice of cycling. Here I associate their meanings of cycling to enacting their right to the city, representing a socially just practice. With it, cycling brings public health benefits, environmental improvements and social fairness through spatial equity. Newcycling attempts to construct a cycling practice within an inclusive transport system that is both a safe and convenient method of travel.

In the third section, the campaigning practice of Newcycling argues that initial growth in cycle use is not going to come from activity promoting but rather, within the political structure of the city council. As a result, Newcycling adopt a 'council facing' approach, as opposed to the promotional 'user facing' approach. In order to achieve the implementation of particular standards of cycling design and the construction of separated cycling infrastructure, Newcycling maintain a strong lobbying stance and an expert group in attempting to alter practices within the city council.

Finally, the fourth part of the chapter defines what Newcycling describe as a safe and convenient method of cycling. Newcycling focus primarily on material aspects of cycling practices. For them, it is necessary to over-design quality than use timid half-hearted interim solutions. Therefore, Newcycling are clear in defining that separated and protected cycle infrastructure on a network scale is necessary in order to grow cycle usage. Furthermore, it is argued by Newcycling that any provision for cycling should first and foremost be provided through the appropriation of car space. It is their intention that such transference of space from cars to cycling would weaken practices of driving whilst benefitting practices of cycling, thus creating a more equitable mobility network.

7.1 Historical Introduction

Formed in 2010 by a citizen who handed a cycling petition to Newcastle City Council and another stakeholder who individually campaigned for more sustainable transport, 'Newcycling Campaign' advocated for the provision of cycling infrastructure. The 'Safe City Centre Cycling in Newcastle upon Tyne' petition garnered over 800 signatures from individuals in and around Newcastle. As reported in the petition, the written framework in support of cycling via policy documents were already in place, yet it was the subsequent action that was lacking. The petition subsequently aimed to increase pressure and spark action within Newcastle City Council in providing safer cycling routes. This self-described naivety of assuming things would change as a result of the petition led to the eventual establishment of Newcycling by a handful of existing politically active members of Newcastle.

Newcycling's primary goal has remained consistent for the past 8 years in campaigning to improve cycling facilities and create more cycle routes in Newcastle (Newcastle Cycling Campaign, 2015a). They emphasis the power and responsibility the local authority has on maintaining and looking after space in the city and thus they remain their main target in achieving change. The importance therefore relies, for them, upon safe cycling infrastructure rather than for example more training and road safety campaigns (Newcastle Cycling Campaign, 2015a).

Newcycling membership has steadily grown over the years (see Figure 7-1) to the point now where it accounts for 1,625 members. The structure of the campaign reflects George's (2014) observation on critical mass campaigns with a number of key individuals and a broader group of individuals who support the campaign. Key individuals would generally fill committee roles on the campaign; submit comments to relevant consultation plans; organise 'Space for Cycling' event rides and cycling infrastructure safaris; assist in the organisation of other social events; and contribute to the generation of online cycling pieces for the campaigns website. Whilst the broader group of supporters would receive monthly e-newsletter; submit pre-written, standardised letters drafted by Newcycling on particular issues; attend the annual general meeting; and occasionally attend other events set by the campaign.

However, the campaign primarily has a key focus upon Newcastle City Council and its organisational structure. Most notably Newcycling have: lobbied for a cycling strategy,

which culminated in the 2011 'Delivering Cycling Improvements in Newcastle' strategy; taken 'city chiefs' on a bike around the Newcastle city centre to experience the lack of cycle infrastructure; organised cycle infrastructure design courses for council engineers; addressed full council in regards to safe cycling on a number of occasions; organised the 'Love Cycling Go Dutch conference' along with the Dutch Embassy and Newcastle City Council in 2013, which encouraged "decision-makers and practitioners in Newcastle (and its wider economic hinterland) to debate how cycling is at the heart of healthy and wealthy cities" (Newcastle Cycling Campaign, 2013a); and utilised London Cycling Campaigns 'Space for Cycling' campaign, which 67% of Newcastle City Council councillors supported.
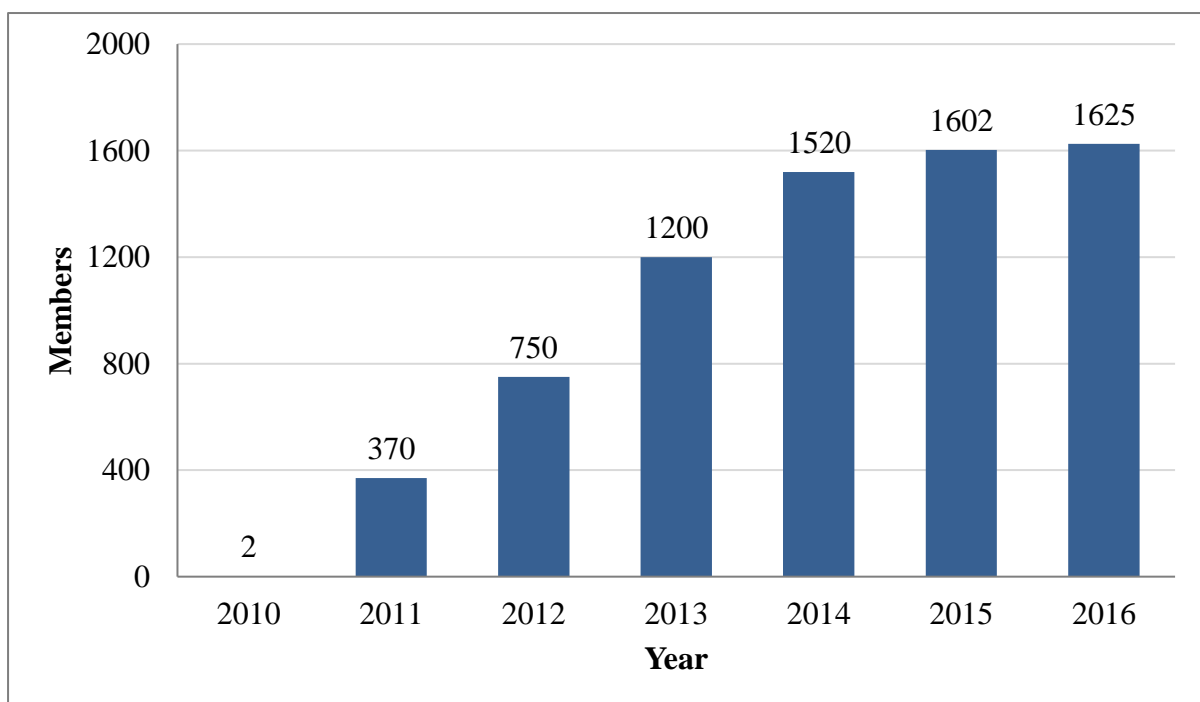
Figure 7-1 Newcastle Cycling Campaign membership rates

7.2   Meanings of Cycling - The Right to the City

Newcycling campaign for the implementation of safe separated cycling infrastructure, but this comes not from a concern for transport policy but from a wider emphasis on the right to the city. Lefebvre's right to the city draws awareness to questions of urban social justice through challenging the hegemonic practices that seek to control urban space (Pugalis *et al.*, 2016). Lefebvre's right to the city refers to the disadvantages of urban life under capitalism and for individuals to take greater control over socially unjust spaces in how they are produced (Soja, 2010). For Lefebvre, "The *right to the city* cannot be conceived of as a

simple visiting right or as a return to traditional cities. It can only be formulated as a transformed and renewed *right to urban life*" (1996, p.158).

Campaigning for a city in which *people* and their safety is put first, Newcycling refer to the creation of a *new* city that rebalances the disadvantages of urban life caused by a system of automobility (Newcastle Cycling Campaign, 2014a; Newcastle Cycling Campaign, 2013b).

> "We must rush to reap the benefits of crushing our car dependence – council planning and societal, perceived and real – and thereby realise the externalities that public health, social fairness and environmental improvements will inevitably bring." (Newcastle Cycling Campaign, 2014b)

For committee members, what they have in common is less the similarities of cycling performances and more in regards to ideas of city futures, its urban design and the politics which enables this right to mobility (Newcastle Cycling Campaign, S3).

> "It's not just about cycling, it's about cities, planning, urban design." (Newcastle Cycling Campaign, S4)

> "[What] we have in common isn't so much actually cycling, its cities and politics and things [like] that, there the things we'd have in common rather than, not really the bit about actually cycling." (Newcastle Cycling Campaign, S3)

> "[W]hen I started cycling I really wasn't madly keen on joining [Newcastle Cycling Campaign] but I suppose now I've found now my people who are the people who are interested in what I'm interested in which is urban design and cities." (Newcastle Cycling Campaign, S3)

> "I think generally I get the feeling that there's a lot of thoughts around social justice around the group and making sure those in power are held accountable because we are all in a sense a politically active group. We don't want to just sit quietly and let something we don't like go by." (Newcastle Cycling Campaign, S1)

By their own admission, Newcastle Cycling Campaign is a 'political campaign' in pushing cycling and more broadly transport up the agenda (Newcastle Cycling Campaign, S3). The concept of being 'political' seeks to identify an inevitable interaction of critique and

opposition to current political processes. For Harvey and Potter, these political struggles are necessary and reflective of engaging with and claiming rights to the city. Yet the fear of this political struggle leading to a descent into endless violence should not "lead us into cowering and mindless passivity" (Harvey and Potter, 2009, p.46). Whilst a member within Newcycling committee group argues "you can't run a campaign group if you're not willing to deal with conflict" (Newcastle Cycling Campaign, S2), it is apparent that other members within the wider campaigning group were somewhat uneasy with this approach. A number of individuals who established SPACE for Gosforth reflected upon this:

> "Initially we just talked about being 'Newcycling Gosforth' and then I think [name] was a bit uncomfortable about the way Newcycling operated, in that Newcycling are very "this is what we want and anything less than this is a failure" which you need, I strongly support what they do really love [name] to bits, she's fantastic. But she's very confrontational and very unbending and we didn't want that kind of relationship with the council or with our local councillors or with anybody who lived in the area." (SPACE for Gosforth, S1).

> "I think the difference, the main difference between SPACE and Newcycling is, Newcycling can be confrontational, deliberately confrontational because it's politicising an issue. SPACE can be, and I support that by the way (*yeah, yeah*) I think you have to challenge and sometimes be aggressive towards public policy and the way it's being presented and also the decision-making, where the decision-making happens. Whereas SPACE is much more about providing racks of information and justification and being less confrontational." (SPACE for Gosforth, S2).

Whilst this identifies a somewhat different campaigning approach between the two it also conveys Newcycling's continual attempt to their right to the city, as avoidance of conflict (as it may be argued in SPACE's case) would be to disengage with and lose any prospect of exercising ones right to the city (Harvey and Potter, 2009). Thus, change must come from those individuals exercising their right to the city through social mobilisation and collective political/spatial struggle. For Newcycling, conflict and confrontation are key elements of being a pressure group and without this the campaign would just be "fluffing around the edges" and "not pushing the system on" (Newcastle Cycling Campaign, S2). As Lefebvre (1996) refers to, this suggests the construction of a new city with foundations of a radical

nature in that, rather than attempting to include cycling practices within the existing mobility system, Newcycling campaign for an alternative city that no longer emphasises and places the system of automobility at the centre.

As already mentioned campaigning for better cycling infrastructure is not only for the right to cycle. But this is associated to a distinctive aspect of the right to the city, the right to mobility. The right to mobility refers to access to the city and the expression of the "right to move in the urban space, accessing places and opportunities, but also the right to stay still" (Verlinghieri and Venturini, 2018, p.127). The right to go to school, to the hospital, to access culture, social networks and so forth rely on and are made possible by getting around the city through the fulfilment of the right to mobility in urban space (*ibid*).

The notion of the right to mobility generally relates to the mobilities tradition (Cresswell, 2006) and notions of 'transport justice' (Martens, 2017; Lucas, 2004). Whilst the right to mobility exists within the framing of the right to the city, the right to the city is generally used less in relation to transportation and the concept of mobility (e.g. Attoh, 2011, 2012; Sagaris, 2014; Verlinghieri and Venturini, 2018).

Newcycling's right to mobility is about the issue of road space and design with transport being a 'social justice' issue (Newcastle Cycling Campaign, 2017a). The city is a place where vulnerable road users, those who walk and cycle, are not well cared for and therefore "there is huge sense of unfairness faced by the small minority of people who cycle as a means of transport" (Newcastle Cycling Campaign, 2014c). People are 'lured' onto safe spaces whilst being 'totally abandoned' at others, having to compete with motorised traffic including private vehicles and buses (Newcastle Cycling Campaign, 2014d). With space limited, allocation should be 'fair' in relation to how they contribute to society. Mobilities that "suck out of local economies such as heavy car use for short distances must be discouraged by devoting less space to it" (Newcastle Cycling Campaign, 2014e). Newcycling contend that people must be put first in Newcastle, specifically in relation to the over provision of car space and the system of automobility:

> "Through a simple and rather ordinary idea, liveable cities with their people-sized transport systems, allowing free walking and cycling, seamlessly linking to buses, metros and trains, is something people experience only on their holidays – Copenhagen and Amsterdam to name the King and Queen of pro-people places.

So close but yet so far. We marvel at their variety: relaxedness, inclusiveness, friendliness and attractiveness." (Newcastle Cycling Campaign, 2011)

Thus they argue that cycling from A to B in normal clothes and for it to be considered normal will not happen without 'some radical changes' in the urban landscape by reallocating space from cars to people (Newcastle Cycling Campaign, 2017b). People are to be put first with vulnerable road users looked after using "the human size – mind, shape and form – as a design unit, not motor vehicles, to create inclusive environments for people of all ages and abilities" (Newcastle Cycling Campaign, 2015b). Arguing that Newcastle requires a 'movement plan', Newcycling refer to the lack of integration of mobilities, which would provide a clear understanding of peoples rights in particular spaces:

> "A movement plan would classify streets and assign social values to them. We repeat our call for a movement plan, so we can **intelligently discuss citizens' right to their city and streets** as well as purposefully comment on future schemes." (Newcastle Cycling Campaign, 2017c)

Thus the campaign largely advocate for the right to the city, in which they identify that the right to mobility is a contribution to this wider nexus. Newcycling's right to mobility asserts the right to participate in the city and experience the city, which depends upon the ability and freedom to move throughout the city through the provision of suitable infrastructure, public funding, and policy development that advocate for more just and equitable distribution upon the various transportation modes.

7.2.1   Kidical Mass – Children's Rights to Mobility

Certain cycling performances such as the 'school run' are utilised by Newcycling to convey such issues when trying to access the city through the use of the bicycle. Parents who cycle with their children find it difficult to do so, with those parents desperate for road design solutions (Newcastle Cycling Campaign, 2015c). Parent's inability to cycle with their children are a result of large volumes of traffic, cars driving on and off the footway, poor sight lines due to parked cars and having to use narrow footways shared with other families walking young children and pushing buggies to the school (Newcastle Cycling Campaign, 2015c; Newcastle Cycling Campaign, 2013c). What parents and members of the campaign

argue is that such issues could be mitigated and removed had there been dedicated cycle infrastructure. In an address to Full Council a member of the committee commented:

> "Support for cycleways has never been stronger, but the lack of safe infrastructure must be overcome. This is particularly important when travelling with children, when you are hauling your shopping around with you or if your physical abilities or age become a challenge. A separate cycle space is totally essential for these kinds of journeys. For the 97% of men, women and children who currently don't regularly cycle, a lack of safe space is the main obstacle." (Newcastle Cycling Campaign, 2016a)

This reflects the right to mobility through spatial justice across all age ranges and for all manner of reasons. Throughout late 2017, Newcycling built upon this particular discourse of children's right to mobility through their 'City4Kids' initiative. Newcycling argued that future plans and the city of Newcastle undermined young families and young people's ability to access the city. Families with children "wouldn't dare cycle as part of their everyday activities in the current road conditions" (Newcastle Cycling Campaign, 2017b). Such restriction in mobility and movement produces 'social justice issues' in which "children are one of the groups who suffer most from car-dominated streets" (Newcastle Cycling Campaign, 2017a). A series of reflective rides written by members with children refer to current experiences of cycling with minors:

> "Ilford Road is really not ideal in terms of road surface and gets complicated when parking is allowed on both sides of the road next to the metro station. Not only does it go uphill at this point but there is a lot of meandering-through-cars before the bridge, which means a lot of breath holding and hoping your child will react adequately and hoping that drivers will be cautious." (Newcastle Cycling Campaign, 2017d)

> ""[P]eople in other countries cycle round with their babies on their backs all the time." She's got a point. They do… As Cyclesprog point out, though, to carry a baby in a sling on a bike would be illegal in the UK for safety reasons; I'm willing to quarrel with the authorities over my own safety, but not over Son's. That's irritating, too – feeling my maternal instincts being employed to force me into a car… As ever in discussions of cycling, it seems to me that the solution

will be reached when we have an adequate and safe network of cycle paths. Only this will normalise cycling for all – even mothers of babies. Only that will give Son, as a child cyclist, the freedom that I want for him." (Newcastle Cycling Campaign, 2017e)

Celebrating newly installed separated cycling infrastructure that enables children to be independently mobile and not having to mix with other motorised traffic, 'Kidical Mass', like its similar namesake critical mass, contends that 'kids are traffic too' (Newcastle Cycling Campaign, 2017f). The Kidical Mass event celebrated the construction and opening of Newcastle's new cycling infrastructure (in particular the opening of John Dobson Street), with families joining the ride that converged on the city centre. The event highlighted the role separated cycle infrastructure played in enabling children to cycle safely and independently.

Observation of the ride noted that it started further out of the city centre, in local residential areas where cycle infrastructure is lacking and thus riding performances exhibited a protective behaviour by adults. This included stopping traffic at road junctions and bunch cycling with parents cycling next to children to provide a buffer between oncoming traffic. However once the ride utilised newly built cycle infrastructure, performances of cycling altered. Parents became visibly more relaxed, allowing children to cycle ahead with social bunching occurring between parents and children. Once the ride had finished and congregated at The Journey with a large traffic-free space outside, children abandoned their bikes and began to play. Whilst it is conceived that a bicycle is a toy for children, amongst the campaign it was evident that for children as well as adults, the bicycle was a form of mobility and travel. Performances of play and socialisation between children rarely included playing on bicycles and racing one another. Parents also refer to this association of the bicycle being a device of transport rather than a toy with one member reflecting upon becoming a mother and the role a bicycle should play for her newborn son:

"When he learns to ride, I want him to think of his bike as a tool of liberation, rather than a cumbersome toy to be played with only in certain supervised circumstances." (Newcastle Cycling Campaign, 2017e)

Incidentally, the Kidical Mass ride took place a day before the 2017 'Lets Ride Newcastle', a 'street festival for bicycles' where main roads in the city centre were closed off to traffic. Whilst this event proved very popular, it was somewhat criticised by campaign members

highlighting that it took the city council to close off roads and make participants wear high visibility tops and helmets to make cycling safe for children and families. The Kidical Mass event however emphasised the ability of children cycling on normal roads when sufficient cycle provision is provided.

7.3   Campaigning Practice

Split into five sections, this part of the chapter introduces Newcycling's campaigning approach in order to understand what practice of cycling is campaigned for. The first part examines whom Newcycling campaign for. It is identified that rather than representing the views of existing cyclists, the campaign instead decentres itself from this association and instead emphasises a reimagined and different practice of cycling. In the second and third section I will argue that as a community of practice, Newcycling heavily distance themselves as a 'user facing' advocacy group that generally encourages cycling as a practice to the local community. Rather, their engagement is focused at political structures within Newcastle and it is argued that a community of practice forms around a 'council-facing' campaigning practice instead.

The fourth section then turns to explore the role of the campaign as a critical friend to the city council. This develops on from the second and third section in which Newcycling identify the political arena as the space of change. Newcycling are critical on three particular aspects in steering the city council towards a transport transition: policy, design, and budget. Whilst the city council are seen to 'talk the talk' and provide suitable policies in developing a sustainable transport system, other statements and investments somewhat conflict these. Transport design and modelling fails to give weight towards a modal shift to active travel, which subsequently perpetuates the car-system, whilst the budget in which to deliver such aims are unclear thus stifling the opportunity to sufficiently plan and programme cycle infrastructure investment. Finally, the fifth section furthers this role as a critical friend in highlighting Newcycling as an expert group, in which the city council can draw upon. The establishment of an infrastructure team and organising training sessions for both themselves and the city council refers to the specialisation of a number of members in order to sufficiently engage with and challenge existing systems of practice that emphasis the continuation of the system of automobility and the marginalisation of the bicycle.

7.3.1 *Campaigning for Cycling*

The positionality of the campaign rejects the identity of being a 'cyclist' and instead emphasises focusing less on the individual and rather to consider the wider practice of 'cycling'.

> "It's about cycling not cyclists so that's what we try and be careful about, not be there to speak on behalf of the cyclists but to speak on behalf of people who want cycling to be more prominent and to increase in the city." (Newcastle Cycling Campaign, S4)

> "So from day one, we tried to engage councillors on what we are about, it's not we are cyclists, it's about cycling." (Newcastle Cycling Campaign, S2)

What is campaigned for is "quite different from speaking up on behalf of the *current cyclist*" (Newcastle Cycling Campaign, 2015d). Members do not see themselves as cyclists nor label themselves as one due to the negative connotations associated to being a 'cyclist' in England (Newcastle Cycling Campaign, S2). But also, in campaigning for 'cycling', the practice becomes decentred from the individual with the practice of cycling not being used to define who they are and the values they hold:

> "Like most of us, I move a lot – there aren't many days in a year where I don't go anywhere. Shopping, visiting friends and family, work, studies, So I cycle, walk and use public transport. Yet nobody calls me a walker or a public transport user… There is a long way to go in the UK to disassociate cycling from leisure/sport and link it to transport, a normal activity that everybody can do, if only the city streets could allow it." (Newcastle Cycling Campaign, 2017b)

Aldred's (2012c) stigmatised practice of cycling is evident here, not only in relation to the wider public but also when engaging with the local council. Newcycling are conscious not to be viewed or labelled as 'cyclists' or a 'cyclists' campaign. The campaign acknowledge that being a labelled a cyclist can stigmatise an individual but they also somewhat agree with and contribute to this stigmatisation of the 'cyclist' themselves:

> "And then you find out that cycling, you go into a cycling shop and it's like, in my mind I had my Dutch friend who used to pop on her Dutch bike and not really

wear anything but when you went into the cycling shop it was like you know the sport, there was clothes you had to wear, reflective things and helmets and that really (*so did you get wrapped up in that?*) well not really I hated it, I used to sort of do bits of it because I felt like there was pressure to do that (*what like?*) like wear reflective clothing yeah, and I don't know, I was just really uncomfortable with it. I was really uncomfortable with the whole thing and cause I don't really like sport. I can't think of anything more boring than watching the Tour de France." (Newcastle Cycling Campaign, S3)

"I know nothing about bicycles and how to fix them; I'm not interested in cycling clothes or bottom cream, I don't follow cycling as a sport, not even le Tour de France." (Newcastle Cycling Campaign, 2017b)

"But I was elated, as I had been for most of the pregnancy. I was proud of still being active; and proud of looking nothing like a cyclist…Similarly, I liked being on a bike despite not being young, male or Lycra-clad…" (Newcastle Cycling Campaign, 2017e)

Whilst this refers to stigmatised practices of cycling, the campaign also referred to the political environment in Newcastle and those who advocated for cycling not helping in regards to their stance:

"[W]e kind of learnt that I think urm, year after year, engaging with people and understanding as well some cyclists can be the worst enemies as well especially the ones who are really hard-core who don't see any problem at all with the current infrastructure." (Newcastle Cycling Campaign, S4)

"Because she is the so-called [title] representative and you know, dropped curbs reminded me that [committee member] and I kind of used to in a way really (sigh) laugh (in a nervous way)… at [name] because she was just going on and on and on about dropped curbs all the time. And we tried to get her onto bigger things, you know, [committee member] more than I, we tried to speak to [name] what campaigning she does, what she's interested in." (Newcastle Cycling Campaign, S2)

By decentralising cycling away from the individual and their personal experiences of the practice, the campaign are able to engage with their wider motive in reimagining who and what cycling can be for within the urban environment. As already identified in the 'Right to the City' section, the campaign has a larger emphasis focusing on citizenship and cycling benefitting the whole city and as a result the association and identity of being a cyclist is void. Rather, Newcycling is more focused on growing the practice of cycling and in order to do so they acknowledge that anyone within Newcastle or who travels to Newcastle, has the right to be a member and engage with the campaign:

> "I mean you don't have to be a cyclist to join the campaign, it's not a requirement. I think that kind of thinking came up because we realised that we weren't there just for the existing cyclists (*right*) we were there for and probably for including research which is about, there a lot of people out there who want to cycle and want to walk but they don't feel safe or they are not enabled to do it because of the infrastructure." (Newcastle Cycling Campaign, S4)

7.3.2 'We Don't Need another Promotional Group Banging the Drum'

Newcycling shouldn't be considered as a cycling advocacy group, in which they promote cycling in order to recruit new cyclists. According to them, this is due to the lack of safe cycling facilities in order to perform cycling and therefore refers to a particularised cycling practice-as-entity, which currently does not meet their standards in which to encourage and recruit potential individuals to cycling. As a result, they heavily refrain from promoting people to cycle and reject this approach outright:

> "We're not a promotion group or anything like that, we don't try and get more people cycling by saying "oh come along and do this, it's great for the environment". We're more the other side saying, "the council wants more people cycling, if the government want more people cycling they have to provide for it". It's not just the case of keep publicizing it and hope people do it." (Newcastle Cycling Campaign, S1)

> "We don't do like rides and stuff like that no. It's not about getting people cycling and it's just, it's about just, it is just literally about infrastructure and then that people will, that comes afterwards." (Newcastle Cycling Campaign, S3)

It is commented, "It's not about getting people to cycle. It's about enabling cycling" (Newcastle Cycling Campaign, S3), drawing to attention that, for them, change lies at the political and government level rather than at the individual. The campaign remains critical about rides and events such as 'The Big Pedal' which "put a lot of emphasis on parents being the agents of change" in 'car dominated' environments, squeezing between parked cars and crossing many roads where there are no crossing facilities (Newcastle Cycling Campaign, 2015e). Bidding for such sporting spectacles such as the Tour de France are also criticised for perceivably providing a wider everyday cycling legacy. Newcycling highlight that whilst such cycling sporting spectacles are welcomed as tourist and culture events, elite sport does not provide an intrinsic link to health and the wider national population becoming healthier and more active in their day to day living (Newcastle Cycling Campaign, 2015f). Rather than being viewed as a catalyst for generating a cycling legacy, such spectacles should be used an opportunity to showcase such infrastructure Newcycling campaigns for, which would have been built prior to the event (*ibid*). In order to normalise cycling, Newcycling highlight that it is 'more than just information initiatives that are needed' (Newcastle Cycling Campaign, 2014f). Such initiatives are only valuable and can be promoted once suitable infrastructure has been built:

> "Once Newcastle has constructed one of their seven planned Strategic Cycle
> Routes and provided the infrastructure is of good quality, we'd welcome an info
> initiative that positively promotes this route, makes people aware of it and attracts
> new users to it." (Newcastle Cycling Campaign, 2014f)

Along with information initiatives, interventions such as cycle training are welcomed, again, once suitable infrastructure has been built:

> "Another example is cycle training. We believe, it is absolutely paramount that
> children learn to ride a bike – every child should have that chance – yet we think
> road conditions, road environment and road layouts must change drastically on
> many routes to school so that children with their parents can enjoy their bike
> commute to school. Newcastle City Council, through Department for Transport
> funding, provides cycle training to schools, but due to the lack of safe routes we
> have very low levels of 'cycling to school' in Newcastle, and countrywide. We'd

like to see better walking and cycling routes to school, and to major workplaces, the city centre and shops." (Newcastle Cycling Campaign, 2014f)

Here they identify and accept that ideas of training people to cycle is a good idea, once something has been built for them to safely cycle on. Until then the provision of such training, circulation of ways to do things, advice and being a space of engagement in 'promoting' cycling would be left to others:

"Erm, so you know, the idea was, once cycling reaches a certain level, could be 5%, 8%, 10% mode share, who knows. But that would then mean something is there, where we know it's just normal, it's seen as normal (*yeah*). But you can't start with erm, constantly saying "we want cycling to be normal" or "we want more people to cycle" that was kind of typical council narrative "we want more people to cycle" and you go "yeah... and… how are you going about that?" and the typical answer in the first few years would have been "oh give them more information, we give them cycle training" all this softy, softy stuff… we've done that for twenty years, maybe we need other things as well, you know bit more material kind of things rather than all this talky, talky stuff and happy clappy." (Newcastle Cycling Campaign, S2)

"It shouldn't be that one campaign should do everything… there's a lot of promotional stuff; it doesn't need another promotional group banging the drum how wonderful cycling is." (Newcastle Cycling Campaign, S1)

The campaign identify that cycling practices need to be created through the provision of cycling infrastructure and whilst promotional aspects are not necessarily wrong, their impact on growing cycle usage is limited due to the lack of safe cycling infrastructure. Rather, once cycling provision has been provided to a suitable level and cycling practices *built*, promotional and competence-based activities would be more useful in *recruiting* people. What this does then is establish a mutually engaged group organised around the political campaigning for cycling infrastructure. Whilst members reject the campaign to be promotional in nature, they do acknowledge that people involved in the campaign do have interests in relation to this promotional advocacy approach outside of the group:

"I think some people have felt it's better to leave rather than keep trying to change the campaign. They've been moved to do something more on what they thought it should be, so if its promotional things they might come and do something say the Breeze Rides or the Sky Rides and things like that. I mean there's [Name] at the moment he does promotional stuff for that, he knows that's what sky rides are for, he's been doing that… But I think the campaign was a bit pushy with the infrastructure, the political buy, the leadership buy in, that's what he puts himself in there for and he put himself into the sky rides for prompting people to get cycling, so there's different groups for different things. It shouldn't be that one campaign should do everything." (Newcastle Cycling Campaign, S1)

What is evident here is a joint enterprise in cycling campaigning. As Wenger comments, a joint enterprise "is not just a stated goal, but [it] creates among participants relations of mutual accountability that become an integral part of the practice" (1999, p.98). Such joint enterprises don't necessarily assume agreement, with disagreement being viewed as a productive part (Wenger, 1999, p.79). With the goal of lobbying the local political structure, there were instances when individuals perceived Newcycling should be a "bit more of the social thing, more of a promotional thing for the council", and have either left as a result or "stayed and perhaps changed their opinion" (Newcastle Cycling Campaign, S1). These moments of challenge and disagreement in which direction the campaign should go create moments where the joint enterprise of the group is questioned and presents moments of disruption and change or as in many cases reaffirms and strengthens Newcycling's goals further. As a result it is up to those who challenged the status quo of the group to both accept and continue to associate themselves with the community of practice or to move onto other groups and events which reflect their views of promoting cycling.

7.3.3   Lobbying the City Council

The campaign has identified the city council arena as the place where most gains for cycling can happen and one where there has been little engagement with in the past. Newcycling criticise the lack of transparency and accountability of the council and in 'throwing open the organisational doors', Newcycling argue for the city council to be more accountable and thus foster cooperation towards common goals (Newcastle Cycling Campaign, 2015g).

"We, the public and community groups like Newcycling, are here to hold decision-makers to account. On modal shift they are not doing near enough. It's lacking transparency. It's lacking a step-by-step plan, openly debated in public. Above all, I hope we can get senior politicians to grasp their own good policies and proudly realise them for the city's future vitality and competitiveness." (Newcastle Cycling Campaign, 2014g)

"We need to change the urban environment, so if you want to change the urban environment we have to talk to the people who hold the decision and you know the power and the responsibilities to change the urban environment. So right from the start we kept talking to the top whilst also trying to engage people within the council on various levels of course, that's always part of it, its sometime you talk to them informally sometimes its formal whatever but that always exists as well." (Newcastle Cycling Campaign, S2)

For Newcycling, the alteration of elements within the practice of cycling must change from the top-down. The campaign as a grassroots movement seeks to put pressure effectively on the provisions by the local government around how Newcastle is to be built and who for. They highlight that the City Council do have aims and objectives that align with such a transport transition and more equitable access to the city in regards to mobility:

"It is important that development is located in the most sustainable locations, accessible by a choice of travel modes including public transport, walking and cycling (Policy CS13). This is to reduce the need for people to travel, minimise levels of congestion, improve road safety and meet climate change reduction targets." (Gateshead Council and Newcastle City Council, n.d, p.44)

"To reduce CO2 emission from development and future growth wile adapting to the issues, mitigating adverse impacts and taking advantage of the opportunities presented by climate change" (Gateshead Council and Newcastle City Council, n.d, p.40)

However, they also highlight the City Council's lack of adherence to them:

"The plans are in contravention to council's policy. Particularly **Local Plan section 11.12** will be violated

The aim of the [Local] Plan is to create sustainable communities, centres and new developments where priority is given to sustainable modes of transport. The hierarchy of sustainable modes of transport is: Walking, Cycling, Public Transport (including taxis), Freight, Car Traffic." (Newcastle Cycling Campaign, 2016b)

While such commitments to cycling and a wider sustainable transport network improve the environment and reduces carbon emission, Newcycling criticise the city council for 'conflicting statements' in such documents:

> "The manifesto [NECA manifesto] naively contains many conflicting statements: it is simply humanly impossible to enhance the environment, improve air quality and reduce carbon emissions by building more roads… Future policy must be made to become truly compatible with future needs, climate change demands, reductions of toxic emissions, local and national policies." (Newcastle Cycling Campaign, 2016c)

Whilst 'Policy UC6 Cycling' (Gateshead Council and Newcastle City Council, n.d, p.136) highlights giving priority wherever appropriate to cycling with cycle improvements and links being developed and promoted in the surrounding area, criticism of conflicting statements results in the cycling policy being in competition with other 1Core policies that emphasise the business-as-usual traffic management (Newcastle Cycling Campaign, 2013d). Reference to aims and objectives are therefore generally criticised for the lack of implementation and adherence to such measures (Newcastle Cycling Campaign, 2016d; Newcastle Cycling Campaign, 2014d).

> "In the Northeast, Newcastle – the regional capital – is undoubtedly leading the way in making the right noises for bikes, but people are yet to see any cycle paths, or roads repurposed and closed down or speeding reduced, rat runs eliminated and unfettered car use arrested… [W]ith Newcastle's wordy promise of better focus and organisation comes responsibility to deliver. To date cyclists have seen nothing but mixed messages from the council." (Newcastle Cycling Campaign, 2013b).

The current budgeting and organisation of the council are also perceived to be unclear. In what they consider as the need for a 'transport transition', it is the responsibility of the planning and delivery of transport schemes to deliver "a more equitable transport system that prioritises walking and cycling" (Newcastle Cycling Campaign, 2014h). The lack of a consistent and dedicated cycle budget within the wider Newcastle council's budget plans means that budgeting for such a transport transition and a cycleway network fit for all ages and abilities is not prioritised (Newcastle Cycling Campaign, 2015l; Newcastle Cycling Campaign, 2016d). If a clear budget existed for cycleway construction then Newcycling argue, engineers and planners "could make much better plans and programmes" going forward (Newcastle Cycling Campaign, 2016a). This extends beyond the local council level and includes national policy development. The 'Cycling and Walking Investment Strategy' refers to a strategy without investment and thus refers to another example, according to Newcycling, of 'warm words' but not wanting to commit to the 'cycling revolution' (Newcastle Cycling Campaign, 2016e).

Newcastle City Council therefore 'talk the talk' and provide suitable and valuable policy developments in regards to the 'right to sustainable and just mobility' (Verlinghieri and Venturini, 2018), yet it is the lack of implementation of these policies that are of concern to the cycling campaign. "Created space in the modern city has an equivalent ideological purpose" which reflects "the prevailing ideology of the ruling groups and institutions in society" (Harvey, 2009, p.310). Urban space is a contested terrain whereby individuals and groups attempt to impose or practise their own spatial ideals, interests collide in the attempt to exert control with different versions of *their* city imagined, exerting powerful effects on the form of the city (Pugalis et al., 2016). Newcycling identify that as the Local Authority and Highway Authority for Newcastle, Newcastle City Council have the "responsibility for the planning and delivery of transport schemes" giving them the power in which to implement an equitable transport system (Newcastle Cycling Campaign, 2014h).

7.3.4   Lobbying as Experts

Newcycling would quality-check highway schemes and designs providing the 'local and independent help' local community groups can provide (Newcastle Cycling Campaign, 2014i). As a result, they position themselves themselves as technical experts, which can be drawn upon and utilised by the council in attempting to trigger a transport transition:

"The Campaign is an expert group; we have more than 6 years of experience and knowledge engaging with the council to make a case and champion quality cycling infrastructure and a healthy and fair city. We are here to help and advise. Our Infrastructure Team led by [name], has not only the technical skills and ability to visualise and design solutions which work for moving people (rather than just cars which seems to occupy much of the common council practice)." (Newcastle Cycling Campaign, 2017g)

Yet, this attempt to work closely with the council and provide a level of collaboration is balanced, maintaining an adversarial relationship until a threshold in planning and design standards are surpassed and consistently met:

"And yes there is a threshold and we constantly look at erm, through the trans, traffic regulation order things that we get through the council as I said is an up, down rollercoaster, emotional, it could be good, could be bad, you never quite know, campaigning is emotional anyway. And constantly assess it against this kind of loose threshold that we've got where we feel the council is now at a point where they need to be full-out full on supported by us but we are not there yet, we're still falling terribly short of that threshold. Some things might start to very briefly cross that threshold, and there's really good, good schemes and then things drop back down again." (Newcastle Cycling Campaign, S2)

With the emphasis upon structural issues apparent in the city council, the campaign are keen to highlight how current methods of transport modelling fails to give weight towards a mode-shift to active transport. As Newcycling argue:

"Models are exclusive of many public health, environment, and social costs and are incomplete as they use over-simplified determinants such as "saved journey time". These are not describing the real world. In addition, they don't model a full/useful network effect but often only look at one junction – this will simply result in "pushing the problem down the road"." (Newcastle Cycling Campaign, 2015h)

"Technically speaking, the design centres around achieving theoretical motor traffic flow capacity and does not account for sustainable living or creation of

alternative networks to alleviate car dependence." (Newcastle Cycling Campaign, 2015i)

Overtime, modelling techniques and transport planning in general has reproduced ideas and behaviours within the functioning of the transport system what is perceived to be socially just and fair. Resultantly, these interpretations according to Fischer (2009) become unreflectively taken for granted in being scarcely noted by actors who employ them. Existing planning practices of 'relieving congestion', 'improving junction capacity' and 'smoothing traffic' need to be rethought as these only perpetuate the car-system (Newcastle Cycling Campaign, 2016a; Newcastle Cycling Campaign, 2015j). Road building practices by Newcastle City Council associated to 'air quality' and 'road safety' further conflate and are counterproductive (Newcastle Cycling Campaign, 2016f). They become accepted presuppositions, embedded within institutions and practices that produce the city.

The establishment of an 'infrastructure team' signalled attempts by the campaign to challenge prevailing old-fashioned highway and road design philosophies to include cycling (Newcastle Cycling Campaign, 2015k). The team refers to a specialised group of individuals, focused on the technical discussion, council consultation and plans in which local members are invited to comment and attend when necessary. The professionalization of a group of individuals such as this are perceived by Newcycling to:

> "[P]rovide independent advice and apply scrutiny to the development, implementation and evaluation of local schemes. They ought to be included in the emerging partnership work in line with the government's 'Big Society' vision." (Newcastle Cycling Campaign, 2014j)

As a campaign member mentions however, expertise is not only in the form of technical expertise, but also in the form networking and gaining wider, national knowledge on cycling measures that may or may not have worked:

> "And expertise is both in the form of technical stuff but also in terms of what's going on elsewhere, how things work in other places. So we'll go to training things and we will give talks and we'll go to conferences, so we're quite well, we're tapped into all the other campaigns throughout the country and Scotland as well. I suppose that's, the way I see it for the council that's a resource and if you

213

as the council want to do something like for instance, improve cycling and you've got a local group of people who, then there's a resource there. Why would you not use that, it seems like an odd thing not to use that." (Newcastle Cycling Campaign, S3)

But how and where to use such expertise within the current political sphere is important in maximising impact of the campaigns practice. Whilst the campaign attended the Cycle Stakeholder Forum for approximately four years (2010-2014), this particular political arena was essentially one that they felt was not of use in utilising their expertise due to the lack of political action and accountability that resulted from the meetings:

"I seem to remember and it was quite apparent the forum was a bit weird in a err you know playing quite a lip service role it was there, people would turn up, I think cyclists are always interested erm but people kinda dropped in, dropped out, it was a kind of erm peoples started realizing that, you know they might have also moved away, you know I think people started realising the forum wasn't going anywhere, this is just a you know window dressing, lip service kind of open up an outlet, there was an action list that if you went through the minutes wouldn't make any sense because there were actions there that never got actioned (*mm hmm*) no one actually on the forum seemingly pressing for those actions erm, you know it was quite a dysfunctional I think so." (Newcastle Cycling Campaign, S2)

This dysfunctionality relates to Newcycling's wider criticism of the transport system, with the political arena contributing to the further entrenchment of the system of automobility as a result of the forums political inactivity. This is evidenced further when the campaign criticised the city council of using the forum to show due diligence in engaging with the cycling population over transport plans regardless of whether the group formally agreed to them or not:

[T]he beginning years was all about 'we're consulting on this' and you know 'we've run this past the cycle forum' so the cycle forum was in a lot of instances a rubber stamping exercise (*right*) 'these are the plans' something gets waved in front of you, you kind of trying to train your eye on what they're actually trying to do and then they're gone again. And you know later on 'the forum has be consulted' 'the forum agrees'… the paradox works against kind of change every

214

time, they, it works for the council not to change, they're waving this thing in front of you. For them its ticking the box, 'we've consulted on this one'."
(Newcastle Cycling Campaign, S2)

As a result, Newcycling left citing the time and effort necessary to engage with such a forum whilst not sufficiently being heard or progressing with transport policy was not beneficial. The establishment of the Technical Advisory Group (TAG) for the campaign "sat on a slightly different kind of plain" (Newcastle Cycling Campaign, S2). Created as part of the CCAF1 proposal to provide an arena in which to scrutinise the development of the Strategic Cycle Routes (SCR), TAG enabled Newcycling to inform and influence the development of plans:

> "So there's been plenty of changes made to different schemes which will be going in which if it just went out to public, what tends to happen is if it goes out to public the council really don't like changing them that much because its, they kind of set an expectation and while they'll change based on very specific objections, the general theme of the scheme will kind of continue throughout…[S]o there was ourselves pushing things into the TAG and then the council picked it up and TAG made the drawings so it worked for them, then it just had the discussion through that and it created a channel to do something like that." (Newcastle Cycling Campaign, S1)

Whilst it therefore provides a platform in which the campaign can engage with decision makers on the future of cycling infrastructure, members also saw it as an opportunity to influence and alter existing planning and engineering practices:

> "One of the things I want to push at the moment is can we not redesign how they should work and have a standard design that the council has which is something we did previously for bus stops so a lot of things started coming out in the beginning of the CCAF 2013 and the one thing which was obvious is they can't keep building the cycleways they had been doing which was they paint a lane on the road and every time you hit a bus stop it's a free-for-all and anything can happen and then you go back to a cycle lane." (Newcastle Cycling Campaign, S1)

Whilst TAG isn't necessarily for this, the campaign uses it as an opportunity to alter the system they are in, start implanting new ways of thinking, new materials and tools such as design standards. They emphasise that the issue is not only about building cycling infrastructure but also building new practices within city council structures that enable such infrastructure to be built:

> "The practices and tools that need modernising are transport planning, traffic modelling, and highway engineering, and perhaps to a lesser extent the subsidiary practice of road safety." (Newcastle Cycling Campaign, 2016f)

> "Councils such as Newcastle City Council have highway authority responsibility for nearly all of their city's roads – and rightly so. But they are not taking this seriously enough. They are lackadaisical when it comes to investigating and learning from collisions to avoid repeats. It's a tragedy in itself that they are seemingly totally unable to show a serious intent to fulfil their legal obligation of making our urban roads safe to use." (Newcastle Cycling Campaign, 2014k)

The council technical ability in terms of technical highway engineering and technical transport planning 'wasn't up to scratch' (Newcastle Cycling Campaign, S2). Even cycle specific schemes lacked sufficient cycle provision with 'painting on a bit of stuff for *cyclists'* and smoothing traffic highlighting the lack of knowledge, tools and understandings in which to design for cycling. Highway engineers were 'still getting it wrong' and as a result, the committee organised 'training for cycle infrastructure design', a number of engagements by well-respected individuals who had been integral in previous cycling developments in London, in order to skill up practices in providing for cycling.

> "[W]e had also put them into contact with John Dales, we kind of kept saying "we need someone in Newcastle preferably stationed in Newcastle who can really, really advise the council on how to prioritize cycling on infrastructure and urban design, a bit like an Andrew Gilligan down in London, that's essentially what we need or a Janet Sadik-Khan, that's essentially what we need in Newcastle, someone who really, really puts it at the heart of what they do… After all of this kind of lobbying in the background and because that [a cycle lead] started to form a bit more firmly I think it was easier for [Name] to organize these

cycle infrastructure design sessions that then happened." (Newcastle Cycling Campaign, S2)

Over the course of three weeks during autumn 2016, a series of training sessions were delivered on infrastructure design (Newcastle Cycling Campaign, 2017h). This also provided the opportunity to push the CROW manual and the London Cycling Design Standards (LCDS) in the aim of such documents being utilised in the future and absorbed as part of design planning and engineering practice. What was also evident though was members of the Infrastructure Team at the campaign also took these classes, thus further strengthening and reaffirming their 'expertise'.

7.3.5   *Political Community of Practice*

Whilst it has already been acknowledged that Newcycling don't bang the cycling promotional drum, it is not to say that they do not engage with any social activities. They do have a Facebook site 'Friends of Newcastle Cycling Campaign' which can be seen as a hub where conversations and discussions on topics related to cycling can happen. Yet, the format of the page is that "it's just, it's there" and none of the committee members manage the site nor attempt to utilise the platform to regularly engage with its followers (Newcastle Cycling Campaign, S2). Rather, it is an organic process of the wider cycling committee which engage through such platform with something generally posted on a daily basis by an individual, relating to a broad topic around cycling and not necessarily focused on the specifics of lobbying decision makers.

Informal meet ups have been trialled over the years such as 'Campaign and Friends Meeting' that teamed up with a number of other social sites in Newcastle (Cycle Hub, Sustrans, the CTC and Recyke Y'Bike) at the Cycle Hub. This was organised and developed by a member of the campaign and provided a more social and promotional cycling event that the committee were okay with yet didn't figure within their own campaigning practice. Whilst this generated a crowd of no more than 15 people, there was a lack of structure and topics of discussions. It was assumed that a general chat could be had with everyone, presumably relating to cycling, yet the event failed to draw everyone together for something meaningful, referring to the group's individual diverse cycling performances. Whilst this social evening attempted to draw members together on a social level, what it did highlight was that the groups joint enterprise in coming together and mutual engagement was the politicisation of

the cycling and the lobbying for cycling infrastructure as the event somewhat lacked cohesion between individuals beyond that.

Newcastle Cycling Campaign can then be seen to have a community of practice in a certain manner, but not in regards to the promotion and assistance in developing cycling amongst new individuals. What is important is the joint enterprise of lobbying decision makers and engaging its members with this process. Beyond conventional lobbying methods of encouraging members to write to councils with standardised boilerplate text (see Newcastle Cycling Campaign, 2012), Annual General Meetings (AGM) have more recently been designed as events in themselves to engage with the wider membership of the campaign in regards to aspects of cycle infrastructure materiality. Both AGMs in 2015 and 2017 used the city councils recent development of cycling infrastructure projects to enable discussion and debate of what cycling infrastructure should look like. Workshop groups focused on planned SCRs or the upcoming Streets for People project which were being developed at the time by the city council. Here members were:

> "[A]sked to study the maps, add additional routes where they felt they were needed, and to write any comments they had on the paper maps. When drawing routes, people were asked to use their imagination: not what currently their preferred route is, but where the preferred routes should be if it was safe and comfortable for cycling." (Newcastle Cycling Campaign, 2017k)

Newcycling also developed 'Cycle Safaris'. These Cycle Safari events utilised the development of Strategic Cycle Routes network. These cycle routes serve the city centre and were a focus of the campaign in identifying specific route allocation, as they were only vague lines over a map for a long time. Over a course of four months (May-August 2015) three of the strategic cycle routes and the city centre itself was explored with the emphasis of members attending to provide their views and opinions on the routes and discuss what routes were best when coming to map these conceptual routes outlined in the 2011 'Delivering Cycling Improvement in Newcastle' ten year cycle strategy on the ground. It was generally assumed that those who lived or cycled near to the strategic routes would join a number of the committee members. However, this failed to draw any considerable numbers and generally involved the nucleus of those heavily involved with the campaign and members from other community groups such as Living Streets.

'Civic Cycle Rides' on the other hand regularly engaged with the wider membership in showing visible support for cycling infrastructure in Newcastle as well as attempting to encourage continued action or potentially enrolling members of the group further. It also acted as a visual statement to Newcastle City Council in reminding them of their role in developing a cycling culture. Consequently, the civic rides either started or finished at the City Council head offices at the Civic Centre due to its political significance:

> "It's seen as the seat of power, it's simply that… it's the seat of power, it's nice to be there, it's nice to then take those photos with the politicians there, maybe with the Civic in the background that kind of linking it to, 'this is the building here that can make that change happen. People who sit here in this bit of lovely architecture behind us are the ones who can change the urban design'."
> (Newcastle Cycling Campaign, S2).

As a result of these events, it allowed the campaign to continually pressure the City Council into developing their strategic cycle routes with the campaign advising on preferred routes.

The 'You Report' series led by the campaign engaged with its members to provide their stories and their experiences of cycling provision that inspired them (Newcastle Cycling Campaign, 2013e). With Newcycling's 'eager' attempts to improve cycling provision in the north east, the member led reporting series would lead to a 'library' of cycleways and biking infrastructure which could then be used to learn from in adapting Newcastle (Newcastle Cycling Campaign, 2013f). In reporting back with over 30 stories of various cities, members generated, created and negotiated what cycling was meant to be. What all these stories came to represent was a consistency of what was important and why when considering cycling infrastructure. The construction of these stories by members of the campaign reifies a relationship and notion of a community in regards to cycling (Macrorie, Royston and Daly, 2014).

Importantly though, these examples: the AGM event sessions, the you report series, the cycle safari rides, and the civic cycle rides contributed to the construction of stories which relate particularly to the interaction between those who cycle and the element of materials in cycling. By encouraging members to write such stories and comment on planned routes in their local area, Newcycling generated a particular community of practice that queried and questioned current practices in Newcastle and instead provided alternate and different

materials and rules of cycling in order to contribute to the on-going development of cycling. As a result, such engagement and circulation of stories and sessions were not about informing, reaffirming and protecting a particular continuation of cycling, but rather, refers to opportunities of innovation of cycling in which carriers attempt to alter and change current cycling careers (Macrorie, Royston and Daly, 2014).

7.4   Infrastructural Materiality[11]

This part of the chapter introduces what Newcycling define as suitable infrastructural materiality when campaigning for cycle infrastructure. This section is split into three sub-sections; the first section outlines Newcycling's distinct perception of what cycle infrastructure is desired. The provision of separated cycle infrastructure, which provides a safe, protected and convenient performance of cycling is perceived as the minimum standard required. It is necessary to over-design quality than use timid half-hearted interim solutions. The second section introduces the necessity of the materiality to be connected, creating a coherent network. The importance of a network provides clear classification and definition of what cycling infrastructure is necessary for cycling practices to grow. And finally, Newcycling position the construction of a separated cycle infrastructure network against other mobility practices, particularly car driving. It is argued by Newcycling that any provision for cycling should first and foremost be provided using existing car space. It is their intention that such transference of space from cars to cycling would weaken practices of driving whilst benefitting practices of cycling, thus creating a more environmentally sustainable mobility network.

7.4.1   2010s – Separated Cycle Infrastructure

From the onset of its formation, Newcycling identified that the lack of materials in the form of separated cycling provision restricted the ability of cycling to become a viable transportation option. Newcycling stress the specificity of cycling infrastructure necessary and refer to particular design standards such as the CROW manual and the LCDS in order to maintain a level of consistency of standards.

---

[11] Whilst the terminology 'footway' has been used throughout this research, Newcycling has used the terms 'pavement' and 'footpath'. These should be taken to have identical meaning.

"Yeah, to answer the qualities you can go completely technocrat on that one and point over to the Netherlands and they've got the so called CROW manual and it quite nicely describes in there the quality you need… Depending on what traffic situations you've got, traffic volumes, motor traffic volumes and motor traffic speeds. And we translated that for our campaign and we need cycleways, you know protected space away from motor traffic on main roads." (Newcastle Cycling Campaign, S2).

"We want to make sure general aspects are covered and would like to ask council for confirmation that the cycle lanes are a minimum of 1.5 metres wide. We'd also like to see continuous colouring (surfacing, not paint) for the planned cycle lanes not just at locations crossing side streets. This would send a clear message that Newcastle has a consistent approach to cycle safety and route continuity." (Newcastle Cycling Campaign, 2014i)

The 'You Report' series led by the campaign engaged with its members to produce accounts of cities they'd visited where cycling had inspired them (Newcastle Cycling Campaign, 2013e). The collection of over 30 stories across various cities provides a member generated and negotiated account in defining cycling infrastructure that could be learnt and adapted from for Newcastle (Newcastle Cycling Campaign, 2013f). Importantly, the accumulation of these stories provides a definition and description in more detail as to what 'separated cycle infrastructure' entails.

Cycle infrastructure for members was about keeping road traffic and cycling separate, protecting and ensuring safety as a result of the lack of conflict and danger involved. This included keeping cycling separated from public transport like buses and trams and not encouraging shared space between these modes of transport (Newcastle Cycling Campaign, 2013g). The importance of consistency and continuation of such cycle infrastructure means routes do not 'throw' people back onto the 'busy' road (Newcastle Cycling Campaign, 2013h, 2013i). This distinguishes that whilst the road is generally for the car, cycling as a mode of transport has its own dedicated space:

"Facilities exist for cyclists who have their own space, clearly separated from the road and footpath facilitating access for people on bike" (Newcastle Cycling Campaign, 2013j).

"Cycle infrastructure in Kiel is at all the places where traffic is busy, helping to take the cyclist away from possible conflict and danger. It's very cycle friendly, no paths just stopping or throwing you out onto a busy road." (Newcastle Cycling Campaign, 2013h)

Such space has meanings of socialability and are for all ages as a result of the 'high quality provision':

"[E]nough width to safely allow two people to ride side by side. The width is especially important for family cycling as it allows parents to cycle alongside children who are learning to cycle. Parents can cycle alongside their children and place a protective hand on the child's back." (Newcastle Cycling Campaign, 2017i).

Various terminologies is used by members in regards to this cycling infrastructure: cycle lanes (Newcastle Cycling Campaign, 2013k, 2013l, 2013m); cycle paths (Newcastle Cycling Campaign, 2013h); cycle tracks (Newcastle Cycling Campaign, 2013n, 2013o); cycleways (2013p, 2013j); bike ways (2013q, 2013r). Yet, regardless of the terminology, the common theme is that cycling is separated from motor traffic in some form. Separation through gradient or material related infrastructure clearly distinguishes and justifies cycling's space. This maybe as simple as buffer markings on the road; rubber markers; kerb separated infrastructure; or fully separate dual direction cycle lanes away from the road and alongside wide footways. The importance of these dedicated spaces for cycling then are highlighted by members drawing to attention aspects of protection and convenience:

"When the cycle lanes are on the road they are protected by rubber markers so drivers would be aware of crossing into the wrong lane." (Newcastle Cycling Campaign, 2013k)

"Kerbs & planting separate bikes & vehicles on Hornby Street, Vancouver; part of growing network of quality bike ways." (Newcastle Cycling Campaign, 2013r)

"And they're not just a bit of paint on the carriage way. First of all, the cycleways are clearly identified and marked with bright colours; on the roads with higher speed limits, they are often protected from the motorised traffic by mini bollards. Secondly they have right of way, as shown in the roundabout picture. And they

are continuous and well maintained (no potholes!!).” (Newcastle Cycling
Campaign, 2013p)

Figure 7-2 Cycle separated infrastructure. Top left clockwise: Estepona (Newcastle Cycling Campaign, 2013p), Dublin (Newcastle Cycling Campaign, 2013s), Vancouver (Newcastle Cycling Campaign, 2013r)

Whilst member's stories generally highlight best practices, it was just as important to highlight where cycling infrastructure wasn't as good. Where cycling and walking exist next to one another it is also stressed that both spaces are clearly designated in order not to cause confusion (Newcastle Cycling Campaign, 2013t). Low profile studs that distinguish between walking and cycling zones were criticised for its subtlety with pedestrians walking where cycle spaces exist (Newcastle Cycling Campaign, 2013u). Whilst other members were keen to stress finer aspects of separation:

"Whilst we cannot comment on the (completeness of the) local network…
deriving a bigger picture from one picture is not possible… and to remain critical,
the footway could possibly be wider and the cycleway kerb should perhaps be
chamfered (forgiving) – however the photo nonetheless impressed us for its
clarity of space and sheer presence the streetscape apportions to cycling. It really
sends a strong visual message that cycling is important here, so much so that the
municipality has afforded serious space to it." (Newcastle Cycling Campaign,
2014l)

The importance of such provision and clarity of space is key to future cycling practices and
whilst other interventions other than cycle infrastructure provision is perceived to be
important, these should not be perceived to be as an alternative to such cycle infrastructure:

"Cities that have made it up the ladder and the ones that have set aside space for
cycling, designed out the conflict between drivers and cyclists, so that cycling
becomes irresistible and available for everyone. And people flock. Take to it like
ducks to water. Then there are "little" things like cycle-friendly traffic light
settings, contraflows, pervasive walking and cycling permeability." (Newcastle
Cycling Campaign, 2013v)

Whilst there is a mention of vehicular cycling in a favourable light with those driving cars
providing patience and space when overtaking (Newcastle Cycling Campaign, 2013l),
reference to this as it being a form of best practice for cycling is generally lacking. The
specificity and rigidity of cycle infrastructure necessary is a result of identifying issues an
incremental approach to cycle infrastructure produces:

"As a cycling campaign we are always quite clear 'incremental change opens you
up'. You've got a big picture, you want to go somewhere at the end, if you do
incremental change but it veers off right from the start at a certain angle, you
might miss the bigger picture (*yeah*) if you keep going along that path. So you
know, we keep it very, very narrow." (Newcastle Cycling Campaign, S2)

When referring to keeping it 'very narrow', the stakeholder refers to the necessity of
separated cycle infrastructure on a network scale. Rather than implementing small
modifications for cycling at particular dangerous hotspots, the comment refers to a consistent

and rigid threshold of cycling infrastructure that is acceptable for safe cycling practices. Anything below this threshold is deemed as missing the wider picture of building a safe cycling network in the aim of growing cycle usage. This 'missing the bigger picture' is emphasised when the member comments on other stakeholders in the cycling population and their campaigning practice in "supporting that wider range because any change is good" (Newcastle Cycling Campaign, S2). In their 2017 AGM meeting Newcycling exhibited this attempt to stay on track and prevent any veering from a bigger picture in a discussion session in which members commented:

> "Local routes are important and small improvements (e.g. dropped kerbs) can make a big difference for existing cyclists.
>
> In response to the above points, members of the Committee explained that the campaign's aim was to get people to take up cycling so quality infrastructure with sustainable safety is absolutely key. A quality cycling network will get everybody and more people to cycle." (Newcastle Cycling Campaign, 2017j)

As a result, it is necessary to "'over-design' quality than use timid half-hearted interim solutions" (Newcastle Cycling Campaign, 2014m). Thus, their vision of protected cycleways along main roads relates to Pucher, Dill and Handy's (2010, p.109) 'cycletracks' definition of cycling infrastructure. They outline that these cycletracks are similar to bike lanes on roads but are 'physically more separated from motor vehicles' through a physical barrier such as a curb, vehicle parking, or other barriers. They are for the specific use of cycling and are not shared with pedestrians.

7.4.2   Importance of a Network

Linked to the importance of clearly campaigning for separated cycling infrastructure is the importance of these routes creating a fully connected cycle network. Access and connections to 'schools, universities, hospitals, large employment sites, and local shopping areas' requires a 'high density cycle network' that 'links up all areas of the city and beyond' (Newcastle Cycling Campaign, 2017k). By advocating a network of these protected cycleways alongside main roads, it is envisioned to "open up the option to cycling to people of all ages and abilities" (Newcastle Cycling Campaign, 2017i). A personal account published on the cycle

campaign website by an overseas student who visited Newcastle in their studies referred to their current experience of cycling, drawing particular attention to a lack of a network:

> "I noticed myself adopting so-called vehicular cycling strategies where cycle lanes were non-existent. Also I was, like everyone else, cycling on roads, on pavements, in parks, on squares, in dodgy back alleys. Since cycle infrastructure is, up until now, very fragmented and incoherent, cyclists in Newcastle just have to forge their own routes across town." (Newcastle Cycling Campaign, 2016g)

Newcycling's 9+2 network (Figure 7-3) expands on the network published by Newcastle City Council's current cycle strategy (see Newcastle City Council, 2011), which identifies seven strategic cycle routes. Newcastle Cycling Campaign are keen to point out that the current seven strategic cycle routes facilitate primarily a commuter based practice of cycling, in which only 1 in 6 of all current journeys are commuter based (Newcastle Cycling Campaign, 2017i). They therefore highlight that for cycling to be inclusive the network needs to reflect the broader means of travel. Cycle infrastructure needs to be connected and 'joined up' (Newcastle Cycling Campaign, 2013w), not only as a network in itself, but also in connecting practices together so that people can cycle to work, to run errands, to go shopping, to socialise and for leisure. And such a network should have a level of consistency in order to provide a level of clarity to those cycling along it (Newcastle Cycling Campaign, 2013x). With this, Newcycling's incorporation of two orbital routes around the city highlights such travel that doesn't involve travelling into the city centre.
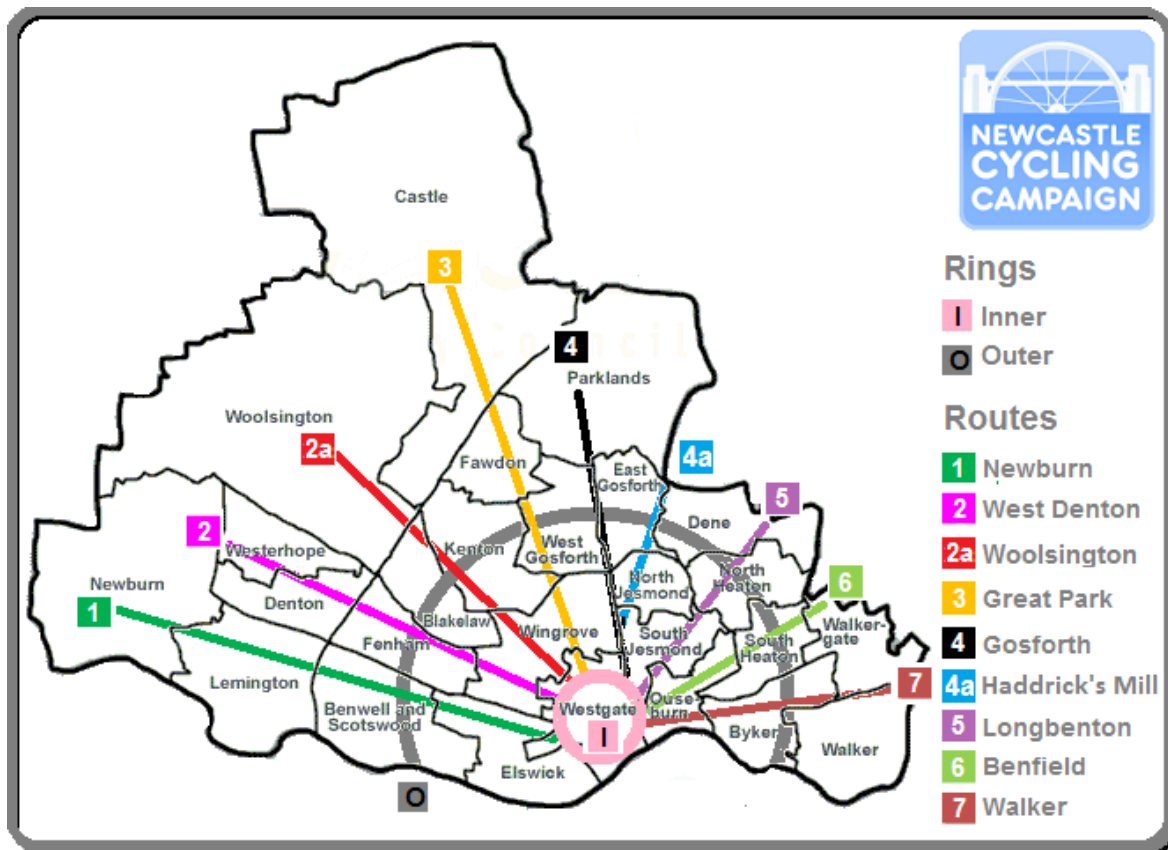
Figure 7-3 Newcastle's 9+2 separated cycle network (Newcastle Cycling Campaign, 2017i)

Existing cycle network plans are somewhat reminiscent of historical plans, including in 1975 when the Tyne and Wear County Council proposed a system of six cycle routes as part of the report 'A Cycleway System for Newcastle' (see Figure 5-4). This was subsequently expanded upon in the 1991 'Cycling Policy and Plan' (see Figure 7-4) with a hierarchy of cycle routes relating to the expected volume of usage on the routes. Similar to Newcycling's vision of a cycle network, distinct routes types were referred to including: 'Advised Routes' relating to main cycle routes, which radiated from the City Centre; 'Linking Routes' that linked main destinations *across* the flow of radial routes; and 'Quiet Routes', cycling routes that fed into and supplemented the advised routes (Newcastle City Council, 1991, p.146). However, a clear definition of the standards in both the 1975 and 1991 networks were rather vague with development generally relating to incremental intersection modifications.
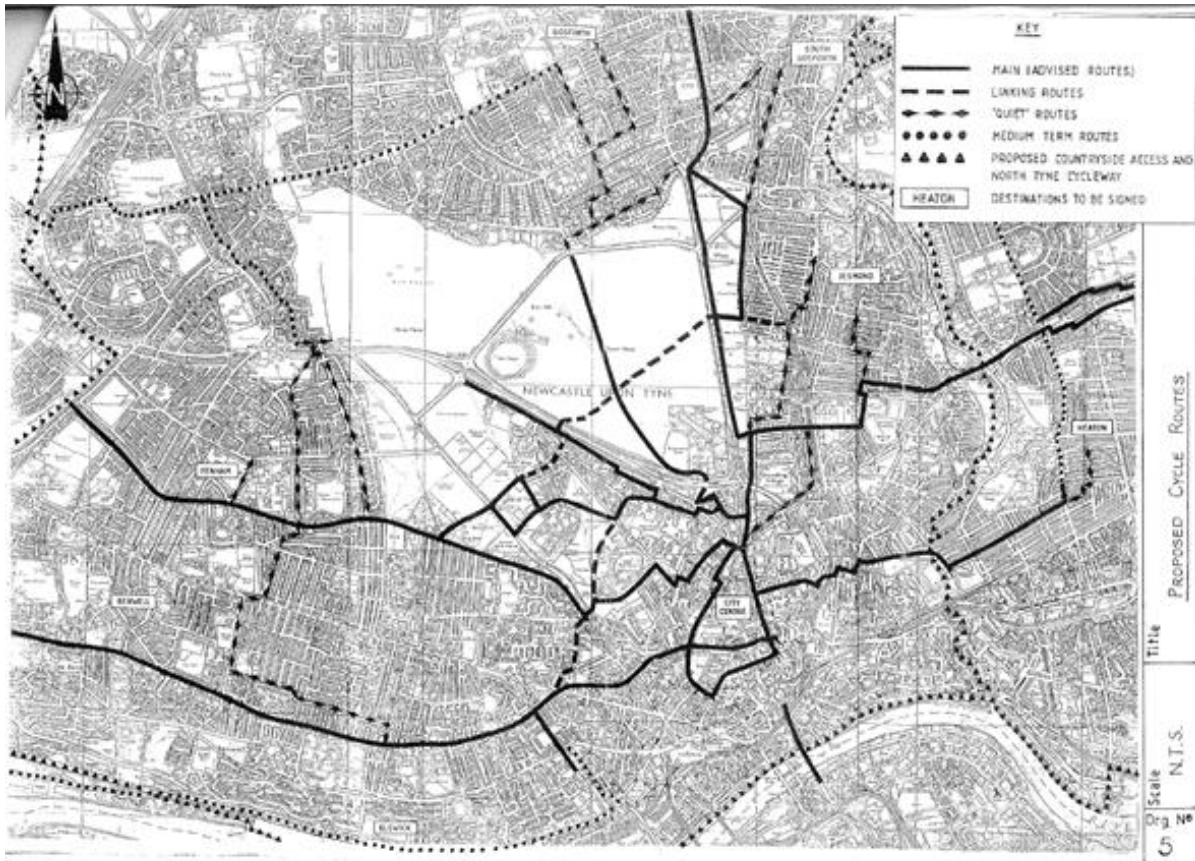
Figure 7-4 Newcastle proposed cycle routes 1991 (Newcastle City Council, 1991)

The adoption of the 'Sustainable Safety' policy, aimed to tackle road safety through looking at the whole road network and developing suitable space for cycling. The framework refers to five principles of functionality, homogeneity, predictability, forgiveness and state awareness. It is important to raise here the value of two of the five principles, functionality and homogeneity, in stipulating a particular type of cycle infrastructure. Functionality refers to categorising the road network in regards to its function and purpose in order to determine the relevant design parameters. Newcycling outline that the classification of the subsequent road network relies upon "knowing certain data such as traffic volume, speed environment and modal share" (Newcastle Cycling Campaign, 2014n). Resulting from this the road can be defined either as a 'national road', 'district access road', or a 'local access road' and subsequently results in the need for 'heavy-duty cycling infrastructure' as is the case for district access roads or a 'light-touch' approach in quieter, slower local access roads. Whilst national roads refers to motor traffic roads only, Newcycling stipulate that district access roads provide access to destinations such as where people live, play, shop and work. The 9+2 network can be seen as a prime example of these roadways and it is identified that due to the

228

speed differences between bicycle and car traffic, a separate stream of traffic between the two needs to be maintained. As a result cycling requires "allotted dedicated safe space" (Newcastle Cycling Campaign, 2014n). Finally, local access roads refer to neighbourhood roads and residential streets wherein neighbourhood zones similar to the concept of the Woonerf are advocated, enabling all road users as well as pedestrians being able to utilise the space safely.

When evaluating the city councils proposal for various road junctions and schemes, the 'sustainable safety' framework and other documents such as the CROW manual help assist and structure the campaigns evaluation of such schemes. Criticism of such proposals is a result of the lack of engagement in understanding what is necessary in particular cases:

> "[T]o use the Dutch matrix most successfully, a sensible road classification system must be present in the urban transport network. Unfortunately Newcastle planning has been a bit lax with its classification of roads over the decades. As a result, we have many streets that are sadly through routes, like residential rat-runs and areas that should be treated as a destination but instead are prolific through-roads – or as US Americans call them *stroads* – neither roads nor streets, but a mix-up. We will keep mentioning the importance of road classification to the council, that any good transport system starts with a strongly defined network." (Newcastle Cycling Campaign, 2015n)

Thus, without a clearly defined mobility network, there is a lack of understanding of the network to be created beyond the current seven strategic cycle routes. As it is highlighted here, whilst separated cycle infrastructure is key in generating a core cycle network, the network must also incorporate minor roads that facilitate cycling practices further.

7.4.3   War on Automobility

Newcycling's campaigning for the construction of a highly dedicated, separated cycle network is intrinsically connected to their attempts to prevent the further entrenchment of car driving practices. A link between automobility and more specifically the continuation of road building with many ills of society are described by Newcycling:

"Road building sends the message to everyone that driving is ok, and possibly even something to aspire to. But driving is often not ok: it leaves a trail of bad air and public health concerns, inactivity and personal health problems in its wake. It creates congestion, with huge amounts of space necessary for parked cars, which sit unused for around 23 hours a day." (Newcastle Cycling Campaign, 2017l)

The importance of a dedicated cycle network exists within a wider transport system that emphasises the reduction of the system of automobility. Newcycling's promotion of Cycling UK's 'Space4Cycling' campaign highlights that cycling in liveable cities require the provision and allocation of fair space. The provision of more space to one mobility (cycling) requires a particular reduction in another. As already highlighted, the 'transport transition' requires that the provision currently afforded to cars in such environments is too favourable. As a result, the 'Six Building Blocks' of the Space4Cycling being: road diet, space definition, neighbourhood zones, safe junctions and crossings, speed reduction, and information campaign emphasises the unpinning and breaking down of certain elements associated to the car-system.

Road diet - In the first instance, a dedicated and separated cycling network requires legitimate space. 'Road space re-allocation' refers to the concept of 'road dieting' in which new cycle space is created specifically from car space and not from other mobilities such as the footway (Newcastle Cycling Campaign, 2013y; Newcastle Cycling Campaign, 2015m). In doing so it is highlighted that reducing space for cars undermines its power and ability to provide convenient access to the home, work, leisure spaces and social spaces. In making cycling more of a real choice through this space re-allocation and removing existing benefits to the car, the bicycle becomes a more sensible transport alternative in the attempt to produce a modal shift away from journeys by private car (Newcastle Cycling Campaign, 2013y). John Dobson Street in the city centre provides an example where the campaign pushed for dedicated cycle infrastructure in the city and achieved a positive reaction from the city council. Significant 'road-dieting' was achieved by removing two full road lanes (one in each direction) and restricting car access at certain junctions to reduce 'rat-running'. Figure 7-5 provides a visual idea of road dieting near to a local school where paid car parking is removed on one side of the road in order to afford protection from motor traffic.

Figure 7-5 Newcastle Cycle Campaigns designs of potential road dieting (Newcastle Cycling Campaign, 2013c)

Space definition - The emphasis of road space re-allocation particularly on roads at or over 30mph speed limit refers to the planning for different road classifications. In such environments, designing 'outside-in' refers to providing for pedestrians and the cycling space before looking at what is left for motorised transport (Newcastle Cycling Campaign, 2013z). This rejects the 'free flow of vehicular traffic' modelling which Newcycling highlight as traditionally not accounting for desired modal shift and consequently "a barrier to designing for cycling and walking" (Newcastle Cycling Campaign, 2013z).

Neighbourhood zones – Whilst dedicated cycle provision is integral in spaces where road speed is high, transitions to cycling also includes restrictions to car use in particular areas. Permanent road closures; linear car parking restricted to smaller bays of parking or removed completely for cycleways; removal of road lines; or transforming a two-way road into a one way street with a contraflow cycle lane is all about the rebalancing the road environment (Newcastle Cycling Campaign, number 2014o).

231

Safe junctions and crossings – With their hypothetical question of 'can an 8-year old cycle and walk this location unaccompanied', one key part of the network is that crossings and junctions that are safe. As a result, cycling requires priority over side roads, and traffic light phasing that are cycle friendly by providing cycling head starts, countdowns or their own phase at a junction (Newcastle Cycling Campaign, 2014p). Currently, Newcycling highlight how the current junction and crossing environments afford access to car travel over all other mobilities:

> "The use of **excessive guardrailing** at junctions – or elsewhere for that matter – shows that the design balance is out of kilter and that motorised traffic flow is put first, often leaving pedestrians and cyclists stranded and helpless. Whilst risk management is important no doubt, this over-caring also partly exists because of decades of providing for car use exclusively which has left us somewhat reliant on on car-centric designs and beliefs. It's a tangled web we should be able to start to undo." (Newcastle Cycling Campaign, 2014p)

Speed reduction – By reducing speeds in urban and residential areas to 20mph it is perceived that streets become safer for people, even without cycle dedicated space (although this also depends on the combination of traffic volume and speed) (Newcastle Cycling Campaign, 2014q).

Such measures have in common cutting back car space and car convenience in order to balance the needs of cycling and walking. As already highlighted in the 'Right to the City' section of the chapter, such transformation for Newcycling is in creating a fairer and more socially just mobility network that posits notions of human-scale mobility at its heart (Newcastle Cycling Campaign, 2014o). With these methods 'pushing' people away from the car, Newcycling also 'ask' the council to couple this with pull factors such as better infrastructure for sustainable modes (walking, cycling, and public transport) that would provide people with suitable alternatives to the car (Newcastle Cycling Campaign, 2015o). It is therefore the sum of these building blocks that emphasis the uncoupling of elements associated to driving that currently makes the practice a dominant form of mobility. As shown here, many of these building blocks do not necessarily directly relate to cycling but rather, are steps that focus upon the weakening of dominant practices that cycling is in

competition with so that with the development and construction of a cycle network builds and develops a stronger practice of cycling which can compete.

Indeed, Newcycling criticise the council for failing to provide safe cycling environments. But even previous provision of cycle infrastructure is criticised for its development only where there is 'easy space', that is, where road widths are wide enough that allow for cycle lanes to be painted on without the loss of traffic flow and space (Newcastle Cycling Campaign, 2013aa). For Newcycling, this does not generate a reliable and safe cycle network but rather, provides instances where cycling is undermined in instances such as cars parking in such cycle lanes (*ibid*).

Newcycling highlight that the design of suitable cycle infrastructure should be intrinsically tied to car restraint. When commenting on the LCDS draft, they were quick to highlight that such design standards did not acknowledge and implement such measures:

> "Many design ills can be rectified by using car restrain measures such as reducing and controlling traffic access, speed and limiting car parking, unbundling modes networks, zoning and mode filtering. We are not convinced that the LCDS (draft) dictates the use of these traffic/network management solution sufficiently strongly so the design engineer can demand these solutions from the transport planner in advance of street level designs." (Newcastle Cycling Campaign, 2014m)

Whilst certain design details and aspirations outlined in the LCDS draft were good, Newcycling highlighted that such designs were generally overshadowed by a concentration on 'space availability' and 'traffic flow' within the existing road layout, rather than considering and designing based on safety and 'people flow', both walking and cycling (Newcastle Cycling Campaign, 2014m).

Again referring to Newcycling's You Report series, members of the campaign highlighted the emphasis of deconstructing the car-system whilst building new cycling practices. Reference to taking away space from the car, whether this is car lanes or car parking spaces (Newcastle Cycling Campaign, 2013w, 2013l); or reclaiming highway space to create parklets and outdoor seating for direct use by people, customers and businesses (Newcastle Cycling Campaign, 2013r, 2013m). A report from Seville highlighted that the city was going

through a process of growing cycle usage, with the argument focused around the importance to take space away from the car and turn it over to cycling. When interaction occurred with cars, it was regularly highlighted that cycling is given priority, providing a level of confidence to riders (Newcastle Cycling Campaign, 2013g, 2014r, 2013ab, 2013ac); car access is reduced by creating one way streets but allowing cycling contraflows (Newcastle Cycling Campaign, 2013ad, 2013ae, 2013af); and 'opening dead-ends', which allow pedestrian and cycle access to adjoining streets but not motorised access (Newcastle Cycling Campaign, 2013t, 2013ad). These measures enabled greater access for cycling whilst restricting car use. Such examples refer to other cities implementing car restraint techniques that also had a benefit in developing elements cycling too.

7.5   Conclusion

In this chapter I have traced and assessed Newcastle Cycling Campaign's contribution to cycling practices. Utilising the three-element model of practice theory (materials, meanings and competences), I have argued that Newcycling emphasise the importance of materiality in cycling practices. Whilst both meanings and competences are referred to throughout the chapter, these are regularly discussed in association to the material element of cycling infrastructure.

From the onset of its formation, Newcycling emphasised and focused on the lack of suitable and safe cycling infrastructure. I argued that Newcycling prioritised this element above that of meanings and competences in which they contend that a safe and separated cycle network would introduce new elemental meanings and competences, or alter existing elements.

Newcycling's lobbying is situated within meanings associated to Lefebvre's 'right to the city' and in particular the right to mobility. Cycling practices are considered unsafe with particular populations such as mothers and children being marginalised by the existing dominant system of automobility. Their focus on the power and responsibility the local authority has on maintaining and looking after space in the city draws into focus the practice of engineers and planners. 'Lobbying as experts', Newcycling criticise the councils technical ability to sufficiently design and provide safe cycle infrastructure. The organisation of training sessions contributes to a wider lobbying technique of promoting learning within the local authority.

Finally, Newcycling reject being a promotional campaign and argue that initiatives and interventions that refer to promoting cycling meanings and competencies in current cycling practices will do little to make cycling safer. However, they do acknowledge that such interventions and promotional aspects would be more useful once separated cycle infrastructure is built. Newcycling's community of practice refers to the joint enterprise of lobbying for safe cycling infrastructure. Social events broadly contributed to the questioning of current cycling practices, highlighting opportunities of altering and changing existing cycling careers.

[This page is intentionally left blank]

8 The Cycle Hub – Bicycle Advocacy and the promotion of Cycle-Leisure

Whilst the previous two chapters have focused on two cycle campaigns, this chapter turns its attention to a cycle hub. Relatively new in their establishment, cycle hubs provide a range of services associated with cycling typically including some or all of the following: a café, cycle parking, cycle shop, bike repairs, cycle training, bicycle hire and bicycle information. The research methodology for this social site relied more on ethnographic observation than the previous two chapters, engaging with both stakeholders and users of 'The Hub'. It is argued that The Cycle Hub contributes to cycling performances of a leisure based and recreational kind. It is highlighted that this is done through the various services The Hub offers, but in particular in regards to the café, social rides, its location on the National Cycle Network.

The chapter is divided into four sub-sections, the first section provides a broad introduction to the Hub, outlining and briefly touching upon the various elements of the cycle café. The section also seeks to situate the cycle café geographically, visually outlining and drawing upon important connections to the National Cycle Network (NCN) and the city as a whole.

The second section explores the Cycle Hub as a cycling café. It is argued that the café element of The Hub introduces new users to cycling through the practice of eating and drinking, which everyone has familiarity with and continually practice. The use of a café therefore suggests some level of normality to a public who do not cycle whilst also drawing to attention the stigma associated to certain spaces of cycling. Cycle cafés existed before this but The Hub is a newer form that operates on the borders of cycling, actively not associating itself with a particular variant of cycling in the aim of welcoming both existing cyclists and potential new recruits to cycling. As a result, The Hub is regularly used by customers who do not cycle, yet it is contended that the cultural architecture engages them with cycling in the attempt of normalising the practice and thus making existing cycling culture more accessible for future cyclists.

The third section will explore cycling performances popularised by The Cycle Hub through the hosting of British Cycling Rides. Most notably these cycling performances referred to meanings of health and social wellbeing. The rides enabled individuals to learn to ride competently and were assisted by the ride leaders who contributed to reducing the competence and knowledge necessary through the planning of routes, riding guidance, and assistance with mechanical issues. I argue however that the rides relied predominantly on the

NCN to maintain performances of cycling. This meant riders had a lack of understanding and experience of road infrastructure. Subsequent on-road cycling performances highlighted a higher intensity and a more solitary experience of riding.

Finally, the fourth section highlights The Cycle Hub being purposely located along the NCN in order to provide for existing long distance cycling 'local riders' using it for leisure, whilst also enabling The Hub to use the network as a space in which to train new cyclists. As a result, these two particular pieces of infrastructure amalgamate with one another to create a strong network that enables the recruitment and maintenance of recreational cycling performances in and around the urban areas of Newcastle.

8.1 Historical Introduction

Situated on the north bank of the River Tyne, The Cycle Hub is a social enterprise established in 2012 between two local businesses: Saddle Skedaddle, a cycling holiday company; and Cycle Centre, a local cycling shop in Byker that sells and repairs bicycles. As a 'hub' of cycle activities, The Cycle Hub provides a number of services (see Figure 8-1) including: office space, primarily to other cycle organisations; a café; bike hire service for the local public; the 'bike library', a service which provide bicycles to city council departments for various council funded projects; a bike shop that sells various clothing and accessories; a bike repair shop; a number of British Cycling's social rides; and cycle information through the form of event listings, advertising rides, routes and maps. It is located on the NCN National Route 72, which is a part of Hadrians Cycleway, the Sea to Sea, and Three Rivers routes.
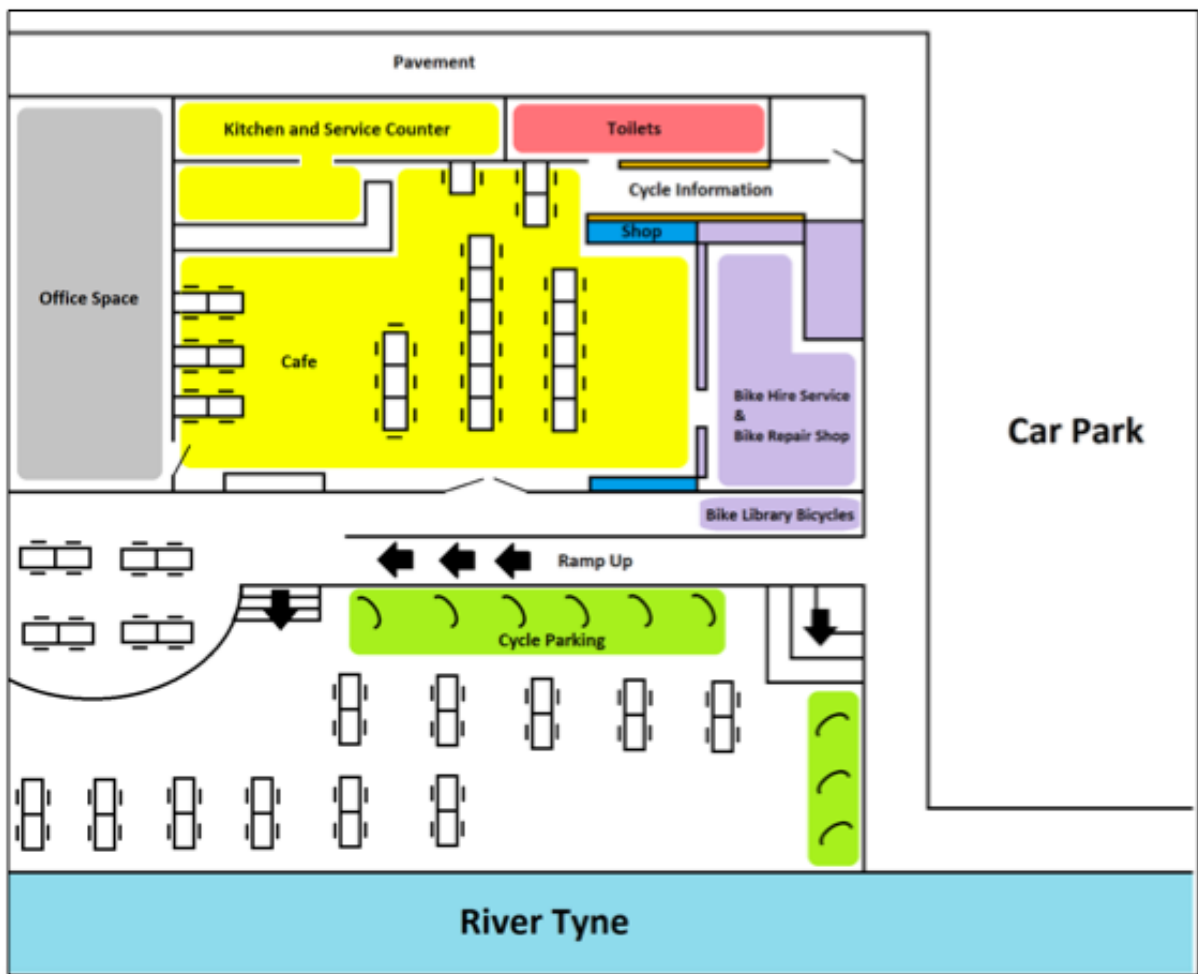
Figure 8-1 The Cycle Hub layout

Its opening hours depend on the time of the year, but are generally 8:30am-5pm Monday to Friday and 9am-4pm on the weekends. Figure 8-2 conveys the cycle flow past The Hub from a cycle counter on a road, approximately 100 metres from The Hub from 2015. During the weekdays cycle traffic experiences two particular spikes in cycle flow between 8-10am and 6-7pm, associated with cycle commuting to and from places of work. Cycle traffic flow past The Hub is also particularly high between 11am-3pm on the weekend, highlighting The Hubs association to performances of recreational cycling.
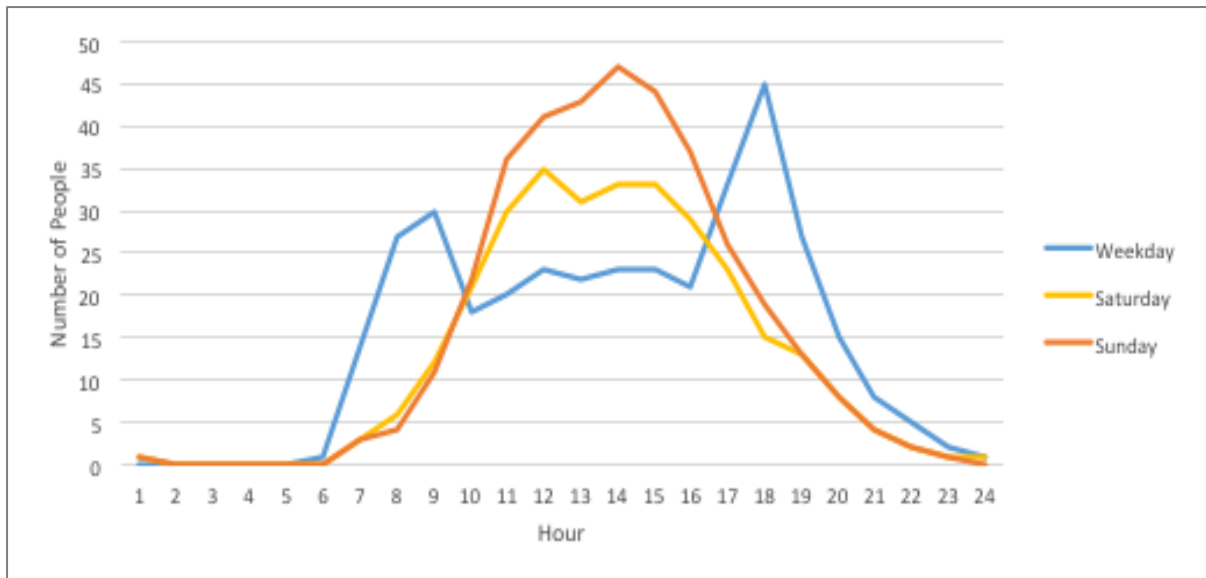
Figure 8-2 Average Cycle Flow for 2015 by Hour, Low Bridge near The Cycle Hub (Gateshead Council, 2015, p.84).

Set slightly to the south-east of Newcastle city centre, The Hub is approximately a mile to the main shopping and business area and is located in the Ouseburn area, a mix-use area of housing, light industry and offices. The area is mostly known for the consumption of arts and culture with the Baltic Centre for Contemporary Art and Sage Gateshead nearby on the southern side of the River Tyne; the Toffee Factory, an arts and creative industry; a number of notable pubs and restaurants; and an inner city farm and stables slightly further north in the lower Ouseburn Valley. The building itself was originally built for the Ouseburn Water Sports Association in 1999, before subsequently being utilised by Newcastle City Council as the Byker and Ouseburn Regeneration Centre.

8.2   The Cycle Hub as a Cycling Cafe

Split into three sections, this part of the chapter explores the café element of The Cycle Hub. The first section highlights the role of the café in providing a space of normality. The Hub owners are aware of the potential stigmatisation cycling spaces have and as a result use practices of eating and drinking to help introduce and welcome individuals who are yet to cycle. The second section expands upon this, highlighting how cafes have historically been associated with cycling. Whilst these have predominantly facilitated existing performances of cycle touring and road cycling, The Hub attempts to operate on the border of cycling, in the aim of welcoming both existing cyclists and potential new recruits to cycling. As a result, the final section highlights how customers of The Hub also include those who do not cycle. It is

240

contended that whilst stakeholders acknowledge that such spaces can stigmatise cycling by making potentially new cyclists feel incompetent, they attempt to not create a specialised space of cycling. Whilst this is somewhat true, I contend that the ethnographic research illustrates The Hub contributing to cycle-leisure performances.

8.2.1 *Space of Normality*

Originally, The Cycle Hub's predominant focus was to provide bikes, loanable to the public and a bike shop that serviced bicycles. However, it became apparent to the owners that a café element was valuable, not only in its own right but also when coupled with other services. One Stakeholder commented:

> "It's [The Hub] quite different from the original concept, the original concept was based mostly around bike shop and bike hire but what we found when we opened the café was it was really successful, so actually its gone from the coffee being an ancillary to the rest of the activities of the business, to it representing about 50%." (The Cycle Hub, S2)

Further explanation of the café reveals the nature of comfort and socialisation it provides in order to subtly introduce elements of cycling:

> "So in order to encourage cycling amongst non-cyclists, they need to feel comfortable that their going somewhere that isn't going to be elitist and needs to be inclusive, so everyone's quite comfy in a café with a cup of tea and scone and so their accustomed to that activity, buying a coffee that they feel okay… when you go into a bike shop, sometimes it can feel a bit intimidating because you think, 'oh these people are all really professional cyclists' so you're feel intimidated by the environment." (The Cycle Hub S2)

> "Erm, but actually we want to make it accessible so that people who are non-cyclists, who wouldn't class themselves as cyclists who fancy going out on a bike ride would come here as well. And hopefully you know, positive environment nice coffee, sense of 'actually this, cycling accessible to me', I think is part of the idea." (The Cycle Hub, S1)

The Hub therefore attempts to provide a 'positive environment' for new individuals engaging with cycling. The space of a café is perceived to be safe and positive for those who do not yet cycle and is somewhere where they have experience of, thus providing some level of normality. This bundling of practices is firmly established in The Hub's motto 'Eat cake, drink coffee and ride your bike', as well as commenting on their webpage 'but don't worry we aren't just for cyclists' (The Cycle Hub, n.d).

Their attempts to distance The Cycle Hub from other cycling spaces such as cycling shops which sell and repair bikes highlights that they perceive these spaces as potentially inhospitable to non-carriers of cycling due to the relative knowledge and understanding needed in which to competently engage with those running the shop. Building upon this, they are aware of the potential negative connotations of aligning The Hub to a particular performance of cycling and therefore attempt to refrain from this:

> "[A]nyone's welcome and I think that one of the things from when we first
> started is whom were we aiming at? Are you aiming at the, you know, the err the
> cycle clubs, road cycle clubs or are you, or leisure cyclists, or anyone. Well we
> didn't want to be exclusive club focused because I think that's not really the point
> in a way it's good to have those people coming here because, in a sense they
> represent part of the cycling community. Erm, but actually we want to make it
> accessible so that people who are non-cyclists, who wouldn't class themselves as
> cyclists who fancy going out on a bike ride would come here as well." (The Cycle
> Hub, S1)

Employees of the café wear nothing cycling specific nor did they give off any signs that would say they are ardent cyclists. Regular discussions with them didn't stray onto conversations around cycling, and when asked their perception of The Cycle Hub their responses were that the café was very normal:

> "We are doing nothing ridiculous with the café, we are just a café. People don't
> come out of their way to visit us. That doesn't mean to say we don't try" (The
> Cycle Hub, S3)

The Cycle Hub therefore acknowledges and attempts to remove associations of stigma attached to cycling. Whilst Aldred (2012c) refer to stigmas attached to the 'cyclist' identity,

this stigmatisation also exists in spaces connected to cycling. The bicycle shops where bicycles are bought are perceived to be staffed by members who are enrolled in particular cycling performances. Their knowledge of bicycles extend beyond just selling bicycles with competences of fixing bikes and further specialised knowledge and interest of a particular variant of cycling such as mountain biking, road cycling, cyclo-cross etc. As a result the stakeholder of The Hub draws attention to potential moments in time and space where potential carriers are put off by the embarrassment of not being able to engage with or be perceived as a 'competent cyclist'. Spaces that enable performances of cycling can therefore act as negative spaces that may restrict the recruitment of new cycling carriers.

8.2.2   The Cycle Hub as a new form of Cycling Café

The bundling of food and drink, particularly coffee, with cycling is not a new concept. Historically, cafés have been associated with cycle touring and road cycle clubs as places to stop off during weekly club rides. A member of the Gosforth Road Club acknowledges this historical association between cafes and cycling. With the importance of such passing trade being a significant economic boost, cafes would contact clubs to try to establish a rapport and encourage them to tailor routes so that their café would be a natural stopping point:

> "[I]f you go back to the 1960s there wasn't many cafes and the ones that were would accept cyclists because it would give business at weekends in the little country cafes and places like this. When you went into the 1970s and 1980s cafes did not want cyclists there, did not want them at all *(really)* oh no they were deemed to be second class citizens, 'we want the motorist', 'we want the Sunday motorist', some cafes even barred cyclists only because they were deemed to be different… And then it sort of got to the late 80s and a few cafes started to think 'well actually, hang on, we're getting regularly customers here in the middle of winter when we won't be getting it otherwise'. Now if I flip it forward to now, every bloody café in Northumberland has got a, I even known cafes which have got signs outside saying 'cyclists welcome, we do cyclists breakfasts'. I actually know a few owners… I have café owners contacting me saying '[Name], how can we attract cyclists, what have we got to do?' and I can name a few only recently who have taken my advice, they've opened their doors a few times and done different things to attract cyclists in." (Gosforth Road Club, S1)

Capheaton Tea Room in Capheaton Village, approximately 20 miles northwest of Newcastle is a prime example of these 'little country cafes' the Gosforth Road Club stakeholder refers to who cater for cyclists. Further cycle cafes beyond Newcastle city centre include Activ Cycles and Kirkley Cycles as shown in Figure 8-3, a cycle map published by The Hub with the aim of promoting leisure cycling in and around the Tyneside conurbation. The member of Gosforth Road Club further acknowledges these when commenting:

"So there's lots of cafes about, you've got one out at the 'gubby' and out near Morpeth, you got Activ Cycles. Now Activ Cycles in Corbridge, he was a chef for Tyne Tees Television and happened to be a cyclist. He originally opened a cycling shop with a little bit of a café on the side, now it's gone to almost being a café with a little bit of cycling stuff in there. Kirkley Cycles, he's a farmer, [name's] a farmer! But they do more on the café side of it than the bike side of it." (Gosforth Road Club, S1)
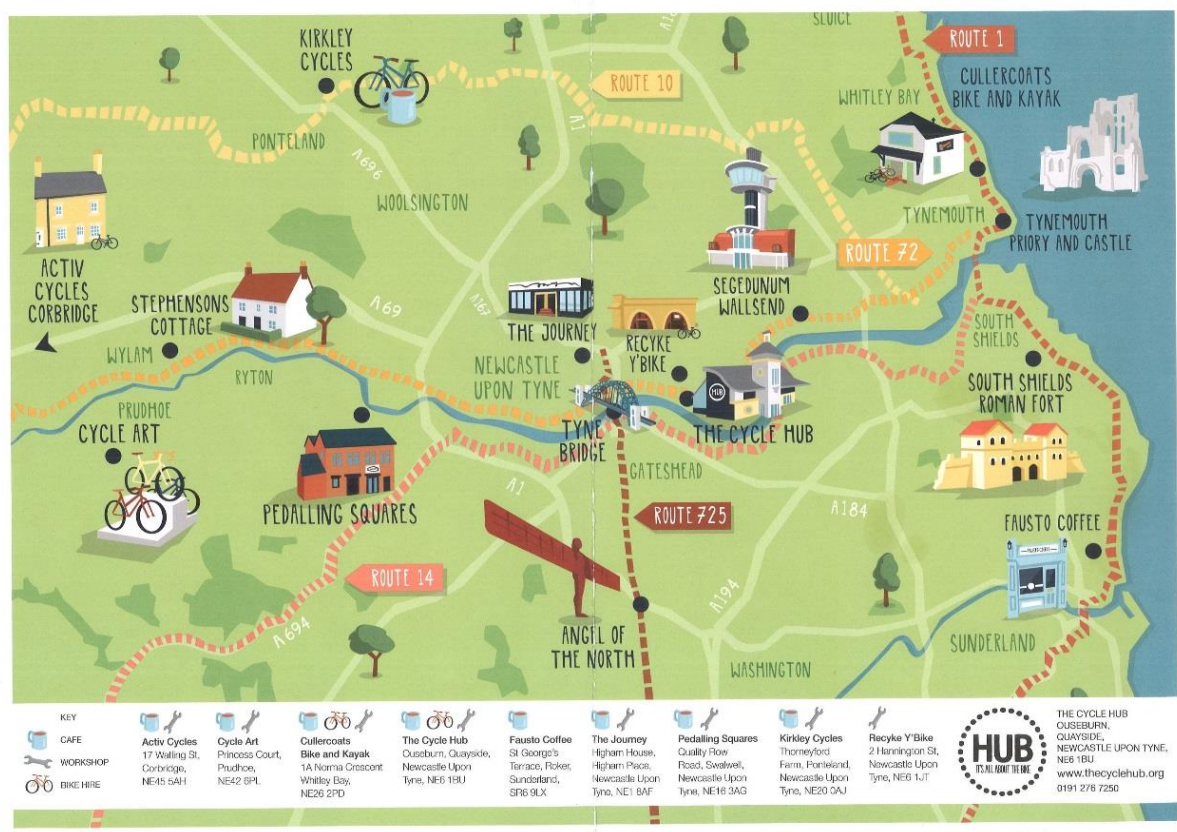
Figure 8-3 Cycle Cafes around the Tyneside conurbation.

This reflects a wider growth of cycling cafes throughout the country. One of the most notable cycle cafes, 'Look Mum No Hands!' in London was seen as the catalyst and inspiration for the development of The Cycle Hub:

> "I was chatting to a friend who happened to work for the Council at the time and he kind of said 'what are you really trying to do, what do you want to do ideally'. Well ideally we would love to have, and Look Mum No Hands had fairly recently opened down in London, and I kind of thought 'ooo that's a really cool idea'. Cycling cafes in that form had started, so we said, well actually this building became available and to me it's a fantastic location from a leisure cycling perspective" (Cycle Hub, S1).

What is acknowledged here is that Look Mum No Hands and The Hub were perceived to be a new form of cycling café and therefore somewhat contrasted with existing cycling cafés. A user of The Cycle Hub refers to this distinction in comparison to other cycle cafes located on the borders of Newcastle when commenting:

> [T]his style is new [The Cycle Hub] but there's always been cafes that have been open to cyclists, Capheaton, you know Elsdon, café in Elsdon, they've always catered for cyclists in terms of what they want to eat (*right*) but these are starting to cater for the cyclist in terms of supporting their maintenance as well. You stop at Elsdon and you get a good meal but there wouldn't be a pump there. But you stop here [The Hub] and you've got all the maintenance stuff as well. And I think they, those people cater for, I guess for more serious cyclists because of their geographical location. The people who went there went out for a good ride you know out on a weekend and they were in places which I guess people sort of doing a recreational ride up the river you know they wouldn't necessarily cater for them, they won't cater for commuters, whereas these cater for all forms of cycling, I guess as well as for serious cyclists. (The Cycle Hub, U1)

Whilst another user of The Hub drew comparisons with another local cycle café, Pedalling Squares:

> "I would say this place sort caters for a broader range, Pedalling Squares is more your hard core cyclists. It's a lot more, run by cyclists for cyclist's type of thing,

whereas I think this is trying to cover all the bases. So all the people walking along the Quayside can walk in, whereas Pedalling Squares, although it is, you can go there, it's a lot more cycling specific I would say… the clientele tends to be almost, almost exclusively cyclists and it's a lot more, there's a lot more cycling paraphernalia… they've got all the race shirts on the walls, they've got a TV constantly running cycling things, as I say there's a mechanics next door. And the menu's sort of you know here's a 'Bradley Wiggins burger'." (The Cycle Hub, U2)

Whilst The Cycle Hub and Pedalling Squares shares a similarity of a bicycle mechanic and the use of cycling paraphernalia, the customer still argues that Pedalling Squares caters for more hard-core cyclists. Whilst The Cycle Hub does adorn the walls with images and quotes associated with cycling, Pedalling Squares use of more road-cycling based paraphernalia such as cycling race shirts; food and drink heavily marketed using road cycling individuals names such as the 'Bradley Wiggins Burger'; and broadcasting of cycle races on the television whenever possible arguably created an atmosphere more tailored to a particularised perception and practice of cycling.

Whilst The Hub has a television in the café, it only broadcasted cycle racing a couple of times. This was after customers asked for the television to be switched on, exhibiting how The Hub would cater for such associations to sport cycling but would not overly publicise or promote this by having the television on at every opportunity (Fieldnotes, 2016; Fieldnotes, 2017). Other than this it was never used throughout large televised cycle events, including during the Cycling World Championships and other stages of both the Tour de France and La Vuelta D'Espana.

Referring to Horton's (2006) concept of cultural architecture then, The Hub is not considered strictly as a 'cyclists' space. Whilst signs and symbols refer to cycling, there is still an element of neutrality in which those not associated to cycling can engage with the environment. Stakeholders of The Hub identify that they do not wish it to be a space that is just safe for existing 'cyclists' to perform, but rather for it to be a space in which both potentially new and existing cycling carriers can access. Therefore, through the various elements of The Hub, it helps to introduce, develop, and re-produce performances of cycling.

8.2.3   Disassociating from Particularised Variants of Cycling Practice

The successful nature of the coffee shop is not solely based upon those who bundle cycling with a coffee and/or food. Rather, individuals generally utilise The Hub specifically as a coffee shop in isolation. From when The Hub opened at 08:30/9:00am individuals would grab a coffee to take-out or purchase one of the freshly prepared yoghurts pots or sandwiches for breakfast or lunch (Fieldnotes, 2016). These individuals were generally dressed in suits or causal clothing with backpacks and laptop bags and either walked or drove[12]. The Hub also experienced a lunchtime surge in customers, as would any other café. At this point in time, those using The Hub were predominantly individuals in non-cycling attire wishing to get coffee or food to eat in or takeaway (Fieldnotes, 2016). Once the rush was over, The Hub reverted back to a larger proportion of its customers attending during or after a bike ride. The owners themselves identify this as an important revenue stream when starting the business:

> "We tried lots of different things; I mean obviously, the obvious, websites, social media that kind of thing. Erm, targeting the offices around here, just to try to encourage people to come for lunch and that kind of thing." (The Cycle Hub, S1)

This is of critical importance for The Cycle Hub economically as it allows the continuation of a cycling focused social site that is less specific in targeting a particular cyclist. The Hub operates on the borders of cycling as a whole, not strongly associating to any one particular variant of cycling. The ability to focus less towards particular identities and performances of cycling, in which members of the public may be put off by the specificity of skills and knowledge's required, enables The Hub to draw in new carriers and potential carriers to cycling with the use of a coffee shop. Those who drink coffee and engage with café culture then become potential new carriers of cycling through the engagement with The Hub.

Whilst the Hub therefore attempts to welcome everyone and tone down or introduce a new space of cycling, it nonetheless draws upon and utilises a vast array of cycling imagery and artefacts. When entering The Hub you are faced with four large images, which are broadly associated to various performances of cycling:

---

[12] These commuters generally parked in The Cycle Hub car park due to the free parking throughout the day and the large amount of spaces. Commuters would then walk a short distance along the quayside to the legal quarter, less than a mile away.

Four distinct images of cycling on the exposed part of the roof. First a woman cycling in active wear. Not in cycle specific materials yet sports top, leggings on a green background of trees and bushes distinct of a traffic-free path or lane. She is out of her seat evoking ideas of climbing a hill or attempting to cycle at speed, therefore associating cycling to performances of health and wellbeing. Secondly, two men at dawn are climbing a hill with off-road bikes specialised for the terrain with thick tyres and suspension on the frame (Fox bike). They are also wearing red and yellow high-vis clothing and helmets. Thirdly, what looks like a sports image of cycling, road bike with dropped handlebars; cleats; cycle gloves and lycra leggings. And lastly similar to the previous image, a peloton of seven cyclists making their way along the road with a mountainous backdrop to their ride again invoking a leisure performance to cycling of health and sport. What these visual images portray therefore is the specialised clothing that people are wearing and specialised equipment of their bikes. No city cycling, no ordinary cycling, no 'in your seat' up right cycling and no images with no helmet on (Fieldnotes, 2017).

The walls are adorned with a wide range of cycling paraphernalia including cycling posters; framed posters refer to particular cycling phrases such as 'climb every mountain', 'all I want to do is ride my', 'can't resist', 'every up has a down', 'you and me', 'ride, rode, ridden', and 'eat, ride, sleep, eat ride, sleep'; paintings and drawings of cycle pelotons seen at road races; whilst a vintage tandem also sits above the entrance door. Figure 8-4 assembles a number of these examples that utilise a variety of leisure based cycling performances. This imagery and association even extends to spaces of the bathroom with large images of cycling displayed on the walls of the toilets.

If a customer turns around, they will always have a reminder of cycling…
Wherever you look, a wall is adorned with something cycling related be it cycling images/posters/photographs by users, bicycles themselves, services to cycling (bike mechanic workshop and rent a bike), information on cycling, cycling routes etc. (Fieldnotes, 2016)

Figure 8-4 Associations and paraphernalia to variants of cycling

As a result of this it was evident that on a number of occasion's public would enter, immediately look up and around The Hub before turning around and leaving again. Whilst this was primarily noted on a Sunday when the Quayside held a local market approximately 10 minutes away, it nonetheless identifies that The Hub still conveys an identity of cycling in which some individuals felt uncomfortable or unwelcoming to them:

> A couple who were 60+ in age looked around primarily at the picture frames
> when walking in, eye line was generally up looking at the photos and pictures and
> then decided to immediately walk out. (Fieldnotes, 2016)

During these times there were considerably more individuals who had been cycling and having lunch due to the time and day. As a result, those drinking and eating were dressed in various yellow and orange waterproof jackets, some with helmets still on whilst sat down with others placing them on the table, and a variety of lycra based clothing ranging from full length leggings to cycle shorts. Yet, whilst this maybe off putting to some, generally the

majority of individuals who hadn't cycled to The Hub resultantly engaged in conversations related to cycling due to the various visual signs:

> [T]wo guys were having cups of tea, one said 'It's good because the cyclists come down here and they can have a cuppa'… Other friend said, 'they've got a cycle shop as well!' (Fieldnotes, 2016)

> A group of four older people, a couple of 60+ and a couple of 80+… This group talking about cycling, and experiences they have had, presumably as pedestrians or car drivers (but not as cyclists themselves). One elderly man mentions cyclists cycling through his neighbourhood recently bunched together as a form of safety in numbers. One of them points at a woman who had mud up her backside and partially up her back, saying 'she hasn't got a mudguard has she!' whilst another commented 'Some of them are dangerous the way they cycle.' (Fieldnotes, 2016)

Whilst those non-cycling individuals utilised The Hub primarily as a standard café, they weren't put off by or deterred by the space. On the contrary, the result of being in The Hub and having a drink whilst surrounded by images of cycling and people cycling somewhat compelled them to discuss their experiences of cycling, both positive and negative. The use of The Hub by such individuals also supports the argument that whilst The Hub caters for existing practices of cycling, regardless of its association and connection to cycling, it didn't inhibit some non-cycling individuals from staying and having food and drink. It is these people that The Hub see as future recruits to cycling.

8.3   Cycling Performances

Split into six sections, this part of the chapter explores cycling performances popularised by The Cycle Hub through the hosting of British Cycling social rides. Primarily planned around the National Cycle Network, specifically the off-road sections, such rides provided 'scenic planned routes' for those involved (Cycling in the City, n.d). As this part of the chapter I will argue that The Hub promotes cycling performances that emphasise social riding associated to meanings of health and wellbeing, whilst lacking elements associated to performances of utility and commuter cycling.

Section one outlines three particular rides advertised by The Hub which helped individuals to go from not cycling or cycling very little to cycling being a part of their everyday lives.

Section two highlights that these rides were generally associated to performances of health and social wellbeing. Clothing for slower and shorter rides reflected general everyday clothing, however longer rides exhibited more specialised clothing associated to sport and active wear, conveying a level of enrolling into particular cycling performances.

Section three refers to The Cycle Hubs 'Bicycle Library' which provided attendees with materials and competences on the ride. The provision of a bicycle free to use as well as mechanical support by ride leaders contributed to the removal of skills and knowledge necessary for riders to engage with the rides.

Sections four and five both refer to the role social rides had in reproducing particularised performances of cycling. All rides were of a leisurely nature with the beginner rides involving a level of learning and development of cycling skills. Pre-planned routes, ride leaders, and the use of the NCN meant individuals could relax and not have to worry about logistical issues. This contributed to the reduction of competence and knowledge needed by participants and therefore emphasised and promoted performances of cycling that were of a sociable and relaxing nature.

Finally, section six highlights the lack of association the rides had to utility and commuter based performances. As the section explores, the reliance on the NCN throughout the social rides meant that riders had a lack of understanding and experience of road infrastructure. Furthermore, performances on the road were somewhat different with a higher intensity in riding and a more solitary experience of riding.

8.3.1   Cycle Hub Social Rides

The social rides consisted of three particular types of rides, which generally attracted different participants based on the ride distance and day of the ride. Monday Beginners Rides primarily involved cycling along the quayside and back at a leisurely pace that was described as 'easygoing'. Rides were generally 6 miles and lasted between an hour and hour and a half.

Monday afternoon rides generally expanded on the beginner rides, utilizing the same route along the quayside before branching off along other parts of the NCN. These rides were advertised as 'building confidence', 'comfortable', and for those 'looking for a challenge' (Active Newcastle, n.d.). Saturday social rides used the same routes as the Monday afternoon

rides, but allowed other members of the public to join who may have been at work through the week and therefore missed the Monday rides. The Cycle Hub (n.d.) website defines the Saturday social ride as a "guided, leisurely sociable ride" aimed at those who may cycle irregularly or those who want to start riding again. Ride distances were between 8 and 24 miles.

More broadly, these social rides provided a continual impetus for individuals to cycle who may not otherwise cycle throughout their daily life. But the social rides also connected to the wider development and enrolling of individuals into cycling once they had completed basic competence based training originally delivered by BikeRight (and subsequently delivered 'in house' by Newcastle City Council). These sessions were also delivered at The Cycle Hub using a section of the large adjacent car park. As a result of this process, it was perceived that these sessions would enable individuals to go from not cycling or cycling very little to cycling regularly as part of wider everyday life:

> "They're aimed at people who don't cycle and encourage them to cycle. So they complete their cycle training and then there's somewhere for them to go. So they might go into the absolute beginners ride to start of with, which will be a three mile bike ride or a two mile bike ride or a one mile bike ride and then they'll move up to the Monday social or the Saturday social and then after that they can move into clubs if they want to, or they can move onto Sky Rides or they can move onto other bike rides that are out there... Yeah the idea is to get them into cycling and then encourage them to buy their own bikes and then start to cycle as part of their everyday lives." (Newcastle City Council, S1)

Beyond this, The Cycle Hub also advertised and promoted the wider British Cycling 'Lets Ride' programme including Breeze Rides, Sky Ride Social and Cycle Cities Tour. Breeze Rides focused on getting women into riding bikes for fun and fitness by making them feel confident and comfortable (British Cycling, n.d.). Supported by 'This Girl Can' a National Lottery supported programme developed by Sport England, Breeze Rides contributed to developing woman empowerment in engaging with active activities. Sky Ride Social were rides that weren't guided and instead were more organic, created and set up by individuals, creating a wider and more interconnected network of cyclists with one another. Lastly, Cycle

Cities Tours provided further competence based training focused in and around the city centre, learning how to use local on-road infrastructure.

8.3.2 The Riders – Motivations and Performance of Cycling

Between 5 and 10 participants attended the beginner rides, along with 2 ride leaders. The afternoon social rides were much more popular with 15 to 22 riders attending with three ride leaders generally in attendance. Those who joined the rides were predominantly white, over the age of 50 years old, and retired. Whilst marginally more women than men attended the afternoon social rides, women dominated the beginner rides. Participants attended the social rides mainly for health and well-being aspects and the opportunity to socialize with others:

> One rider spoke of how she was retired but did a bit of hairdressing on the side and other than that had no hobbies. Whilst she hadn't cycled in a long time, the rides for her were relaxing and vey social. She regularly mentioned attempting to bring her husband out for the rides but his medical condition prevented him from doing so. (Fieldnotes, 2017)

> A 70-year-old lady lived in Byker and regularly got the bus the short distance. Her doctor told her to keep fit and these bike rides would be valuable for her. (Fieldnotes, 2017)

> Woman just getting back into cycling on doctors orders… came to this to get better and fit again. (Fieldnotes, 2017)

Ride leaders regularly acknowledged that they noticed participants gradually progressing from the cycle training course or the beginner rides to the Monday afternoon social rides, whilst those who cycle on the Monday afternoon rides would also begin to attend the Saturday rides too. A number of participants mentioned their intentions to join these longer rides, but both the perceived added pace and distance of the rides were factors that generally questioned whether to go on such rides.

> One woman was seeing if she can come on the Monday afternoon rides and whether she has what it takes. Ride leader commented that there's no stopping at every hill but thinks she can do it. (Fieldnotes, 2017)

Two of the older ladies both talking about doing the cycle training before doing the beginner rides and now one of them is thinking of doing the afternoon ride, as it's a bit further. (Fieldnotes, 2017)

Lady gets the bus in from Gosforth to Byker and then walks downs and comes on this ride on a Monday Morning. She might do the afternoon but isn't making that transition yet, slight pace increase and distance that she's wary of. (Fieldnotes, 2017)

The three rides provided a clear distinction of what participants wore and the association to cycling. Participants joining the beginner rides regularly wore normal everyday clothing such as jeans, denim jacket, normal dark coats whilst others wore some form of active wear such as trainers, tracksuit bottoms or a general sports jacket. Riders in the longer and slightly more challenging Monday afternoon and Saturday social rides however predominantly wore active wear such as polo shirts, sports tops, sports shorts, sports trainers or hiking boots (see Figure 8-5). High visibility clothing was also popular in the form of waterproof jackets whilst some individuals wore bottoms with high visibility trimming. Some participants would still wear jeans and a normal jacket but whilst this was predominant in the beginner rides, it was somewhat less evident in the Monday afternoon and Saturday ride.

Wearing a helmet for the rides were compulsory and very few participants did not have one. It was evident however those who borrowed a free cycle helmet from The Hubs 'helmet bin' were generally riding in the beginner session. Other cycling specific materials such as panniers or touring bags were not evident, rather participants would cycle with small backpacks or small sports running bags. Other participants, especially in the beginner sessions would leave their bags behind the cycle hire stand at The Hub rather than taking them on the ride. Due to rider's age and generally being new or coming back to cycling, carrying bags whilst cycling provided unnecessary weight on their backs, creating difficulties for balance when riding. Due to the short nature of the ride, riders generally predicted what clothing they would need, before packing any unnecessary material away and handing it over to the bicycle hire team member.

Only a handful of participants wore any form of cycling specific attire such as cycling shorts, tops with much of the high visibility clothing being generic active wear than being specific to cycling. It was evident that only one individual wore both a lycra top, lycra shorts and rode a

road bike with cleats, whilst two participants wore clothing that resembled everyday clothing but made with material or designed with cycle specific features such as high visibility strips on the shorts that enabled cycling performances in them as well. One participant commented that this allowed him to meet his wife in the city centre after the ride and not feel out of place in the clothes he wore nor have to change into something more appropriate.

Bikes varied from an individual turning up with a Brompton to someone riding a recumbent bicycle with these two extremes of bicycles being the talk of the rides with other participants wanting to try them out during the half waypoint break. Generally, participants would cycle hybrid bikes with some form of suspension and a thick wheel set, whilst a small number of participants also attended with road bikes. These participants also tended to bring their own tool saddlebag.

Figure 8-5 Cycling attire at social rides

8.3.3 *The Cycle Library – Providing Materiality on the Social Rides*

As part of these rides, participants could also borrow a bike as part of the 'Cycle Library' scheme set up by The Cycle Hub. Formed between The Cycle Hub and local government departments (predominantly Public Health), the Cycle Library provides public access to bicycles for free when used in sessions promoting health and wellbeing (programs include: Live Well, Why Weight as well as the British Cycling sessions).

> "So we've set up what's called the Cycle Library, so all the different departments of the council can dip into this and they can either pay on a hire by hire basis or they can give us a chunk of money say 'these groups are going to use your services'." (The Cycle Hub, S2).

Participants would have to ring The Hub at least 24 hours prior to the ride itself and reserve a bicycle with the cycle hire team in order to have a bicycle ready for the next day. The bicycles are the same as those that are available for hire at The Hub but the cost of renting the bicycle is charged to the relevant local authority department, which in the case of the social rides was the Public Health department[13]. Throughout the course of the rides, most participants in the beginner rides rented a bicycle (see variability, Figure 8-6), whilst the social rides differed with one-third to two-thirds generally renting a bicycle.

---

[13] Shortly after research engagement had ended, renting a bike for the session incurred a £5 rent fee due to cuts in local government.
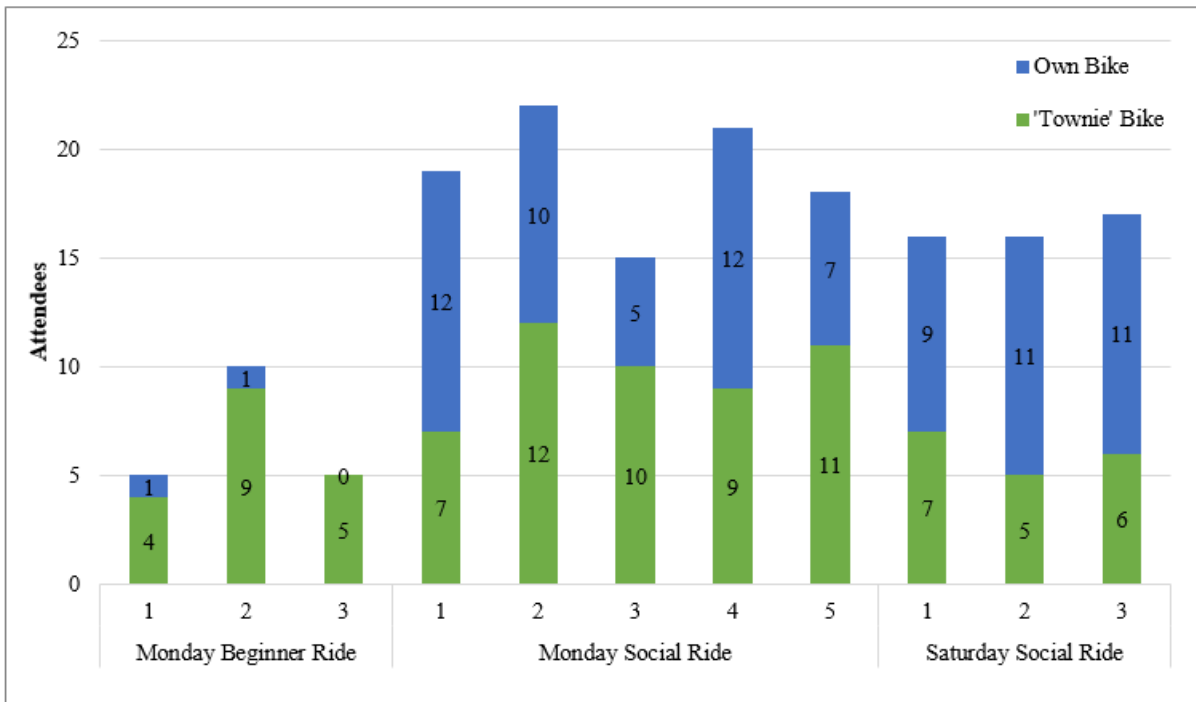
Figure 8-6 Bicycle use on social rides.

The bicycle provided as part of the Cycle Library was the 'Townie', a 'cruiser style' bicycle, advertised as being useful for 'short relaxing journeys that may take place in and around the city' (The Cycle Hub, n.d.). The townie provided an upright cycling position, seven gears and puncture resistant tyres.

Ride leaders were on hand to help with any mechanical faults or issues including punctures, however it was made clear that it was the responsibility of the owner of the bike to bring spare inner tubes and parts if needed. Renting a townie bicycle removed the need of 'know how' of fixing a puncture and also the need to carry the relevant tools and puncture repair kit on the cycle ride. With any other issues with the townie bicycles, it was the responsibility of the ride leaders to assist and help. Therefore, the opportunity to hire a bike for free provided more than just the physical device of the bicycle itself. The Cycle Library removed the reliance on participants having to know how to fix a bicycle, whilst also relying on the device itself and its self-repairing cycle tyres. This was something I myself reflected upon in my own performance when participating in the cycling rides:

> I originally borrowed the bikes for two reasons; the first was in the attempt to fit
> in with such rides and not to be viewed negatively or pre-perceptions based on the
> bicycle I rode. The bike that I owned was a Specialized Allez, an entry-level road

bike, which for the various social rides seemed unnecessary. Secondly, using a road bike on predominantly NCN network seemed not the best idea due to the road bikes thin wheels and rigidity of the frame making the ride incredibly uncomfortable. Furthermore with the Allez more about speed it seemed unnecessary for the leisure rides in which the townie would benefit through its comfort. (Fieldnotes, 2017).

As a result, I continued to use the Cycle Library and the Townie bicycle due to the aspects of the bicycle highlighted. The posture of the rides were much more comfortable and in using the bikes, it provided a level of security that I wouldn't have with my own bicycle. I had more confidence in the bicycle wheels and the ability to self-repair if punctures occurred. Being on the NCN, there was a regular chance of this happening, with sections of the route scattered with glass or thorns from bushes. It also reduced the need to carry any mechanical tools and worry about taking spare inner tubes.

8.3.4   Beginner Rides – Developing Cycling Skills

All rides began with a short 'M-check' of the bike, lead by one of the ride leaders. This involved participants checking particular aspects of the bike including: making sure the seat was in line with the top tube; pedals rotated freely; chain is oiled and not rusty; tyre pressure is firm and spokes are intact; quick release lever is in closed position and pointing up; and brakes worked (Fieldnotes, 2017). Along with this, ride leaders would generally impart some form of knowledge on how best to use the bicycle on the journeys:

> "Today's quite hilly, at some stage there will be steep hills down, please, please, feather your brakes gently okay both sides. If you only use one side of hard braking on the right side this could happen, you might skid okay. Give each other enough space as well… Okay, helmet is a requirement for this ride so make sure you've got one, if you need one there's a free one in there. Make sure its level on your head, not tilted, there's a dial at the back to adjust the tightness of it. Adjustors on the side should be right under your ear lobe, not on your ear or all the way down here and there's a secure strap here which is tight enough but not so tight so that when you look down its going to choke you. Are we happy?" (Fieldnotes, 2017)

"When you are braking you should be *gently* pulling both brakes together. Gears, if you're on a townie all your gears should be on one side, number one really low, really easy; number seven bit more resistance okay. So if there's any up hills on anything like that you're gonna need to be in one or two, depending on your pedal power, on the flat you want to be higher up, five, six, seven, okay. Obviously don't change gears unless you are pedalling because if you do change gears the chances are the chains gonna come off okay." (Fieldnotes, 2017)

Whilst the pace of the rides varied very little due to the slow and leisurely nature, particular aspects of cycling were evident in the beginner rides that weren't in the other two social rides due to a lot of riders being new to cycling or new back to cycling. As a result, riders were generally very cautious when cycling and although the route was generally quite straight along the quayside, it involved a number of tight bends, which caused riders to wobble and stop when manoeuvring around objects or turns.

The beginner rides took on more of a learning development ride. Whilst providing the opportunity for participants to get out and keep active as well as to socialize, there was also an emphasis on building upon and utilizing the skills taught in the original learning sessions that individuals might have attended. Ride leaders would thread in a challenge of some sort throughout the ride to assist in the development of either the biological body, to enhance performance or ability when cycling. This would include cycling up a slight incline halfway through the ride in which some members attempted before turning back to the Cycle Hub. Others would usually wait and take a brief rest at the bottom of the hill, with the general idea of progressing throughout the weeks before competently cycling up the hill managing both the slight incline but also learning to handle the gradient when steering the bicycle. Rides also included practicing maintaining speed and control when riding through bicycle chicanes on the NCN network that occurred at road junctions. Participants would stop before the road junction before taking turns one by one to cross the road, changing gear whilst pedalling to a low gear and steer through the chicane before attempting to accelerate up the slight incline. Whilst this caused some difficulty for riders, ride leaders provided advice in the form of 'know what' for participants to replicate into a form of 'know how'.

Practicing cycling through (gates), some participants crashing. Ride leaders commenting: 'don't look at obstacle, look where you want to go with your hands and the bike will follow your eyes'. (Fieldnotes, 2017)

Further ad-hoc advice such as to "pedal when changing gears otherwise the chain may come loose" was provided throughout the beginner rides in the aim of developing participant's competence and riding skills.

8.3.5   Monday and Saturday Social Rides – Sociable Leisure Riding

Throughout the course of the Monday and Saturday social rides two riding formations were generally adopted. The first, which I consider 'social bunching', and the second that involves single file riding, resultantly shaped the experience and performance of the cycling rides. These two cycling formations and approaches to the ride generally created two distinct atmospheres, one of engagement and socialness and the other of intermission and solitude. The rides were largely formed by large stretches of social bunching, punctuated with moments of single file riding as a result of cycle infrastructure, lack of infrastructure, or interaction with people outside of the social ride.

Social Bunching

Social bunching largely occurred on large stretches of the ride where the space to ride side by side and chat was possible. Social bunching included riding in a group, generally two abreast with this formation retaining a social atmosphere within the group (See Figure 8-7). Whilst riding, participants struck up conversations with one another. The nature of the NCN allowed the ease of cycling side by side with one another. Discussion topics rarely involved cycling and instead revolved around everyday life, activities, and family issues and what everyone's children were up to. Through the course of the rides discussions such as these built on one another with participants wanting to update me on particular topics we had previously discussed or ask further questions about myself. Apart from engaging with them on the rides once a week and a short chat after the rides in The Hub, we never spoke. They were very open and happy to chat and due to the nature of the rides you would regularly stumble upon conversations and join in when overtaking or dropping back. These discussions would continue back at The Cycle Hub once the ride was over with a general core group of six to

260

eight participants usually staying behind for 30 minutes to an hour chatting over coffee and cake about a number of broad subjects:

> Some discussion of bike rides coming up in the future, but other conversations are the Hairy Bikers show, two women talking about when one of them went to Cyprus and talking about when she got divorced. (Fieldnotes, 2017)

> 13 stopped for coffee and cake, talking about their families, what their kids are up to. All similar age 50/60+. Lady and gentlemen discussing cars as gentleman had just bought a new car whilst lady's daughter is looking to buy a car, with them discussing the reliability and sporty nature of the car. (Fieldnotes, 2017)

Figure 8-7 Performances of social bunching

Cycling slightly staggered also occurred and generally materialized before or after conversations with riders or when a participant was looking to advance further up the group or drop down. This riding performance provided moments and opportunities of new conversations and chats to happen whilst also enabling other participants to switch off and enjoy cycling along on their own but also still being engaged with, guided and carried along by the wider social atmosphere that was around them.

This social bunching also occurred within the group itself. The group would naturally split into two or three sub-groups based on the pace of the ride. This splitting of the group was largely enabled by the structure of the ride by the ride leaders themselves. The ride generally included three ride leaders all with distinct jobs. One leader dictated the pace of the ride, leading and directing at the front. Whilst the rides were marginally more female, the gender split at the front tended to be predominantly male. The second ride leader at the rear would ride at a slightly lower pace, generally monitoring the pace of those who maybe slower and encouraging them to speed up if necessary in order to keep some form of visual connection with the rest of the group. At the back, participants were predominantly female. Finally, the third ride leader acted as a reactionary 'floater', generally travelling up and down the group delivering messages between the front and the back of the pack and being very vocal and animated. They would accelerate to the front of the group communicating with other participants of their presence and help dictate when it was safe to cross road intersections along the ride, or remaining in the middle of the ride group in order to react in any situation.

> [Name] stopped at junction shouting encouragement 'come on guys, keep going' and telling participants to cross and not to worry about looking. Assisted in keeping us all continuously cycling after the hill section. (Fieldnotes, 2017)

> Loud and authoritative shouting at traffic light junctions: 'stop! Keep going, keep going, keep going! Go!' Getting over two-stage junction took a while on Scotswood Road. (Fieldnotes, 2017)

> When ride leader accelerates to the front of the group she mentions assertively 'coming through to your right, on your right!' (Fieldnotes, 2017).

This role enabled the fluency of the group to continue at particular points of potential disruption and confusion for participants. This particular role generally appeared frantic and

reactionary, but in establishing such roles, the wider participating group was able to experience a cycling performance that was relaxed and very sociable. Participants rarely had to worry and would comment that the structure of the rides allowed them to turn up and go for a bicycle ride without having to worry about any logistical issues such as the route plan.

> Participant comments that 'ride leaders look after you, you don't have to worry as they will deal with difficult points in interaction such as road crossings and will also ride along and talk to you too'. (Fieldnotes, 2017)

This ties in further with the loaning of a bicycle, in creating an atmosphere where potential stress and extra duties and roles are placed on the ride leaders or the materiality of the bike. This contributed to reducing the competence and knowledge needed by the participant and therefore emphasized and promoted the meaning of the rides as a sociable and relaxing opportunity to cycle.

Single File Riding

While bunched riding was the most favoured and consistent riding performance in the group, the ride had to at times react to incidents that required participants to cycle in a single file formation (see Figure 8-8). Sections of the NCN were not wide enough for the bunching and therefore dictated the group to string out into single file at particular pinch points. This also occurred when there was oncoming traffic by people either cycling or walking, or when physical objects such as gates, broken glass, overgrown vegetation, bins or benches shortened the width of the route. Throughout these moments, discussions and conversations would be interrupted and only recommenced once social bunching was re-established. Otherwise conversations generally stalled and were not reengaged with, others started, or participants turned their attention to the local scenery, particularly at prolonged sections of single file riding. These moments in the ride, which disrupted the predominant rhythm and flow of the ride did however assist in bringing the whole group back together. Other planned stops and breaks at the top of hilly sections or before and after sets of traffic lights enabled the group to remain together and prevent any splitting of the group. This also provided opportunities for participants to gather a breather and drink if needed.

Figure 8-8 Performances of single file riding

It was at these moments when negotiating barriers on the NCN or crossing traffic light sections that participants' ability and competence to cycle became evident. Some participants would cross traffic light intersection walking, whilst others attempted to cycle across but found maintaining balance at a low speed difficult. Crossing roads via cycle bridges also identified the difficulty of a number of participants to cycle up the gradient whilst also turning tight corners. On a number of occasions a few riders who had originally attended the beginner rides and had continued onto the Monday social rides found cycling up the incline section of the bridge difficult, regularly crashing into the corners. Members would try to provide advice in starting wide of the corner and turning instead of remaining tight to the corner. Whilst others drew to attention the need of cycling in the lowest gear when travelling over these footbridges to prevent having to put their feet down once turning the corner due to

the lack of power. This provided moments of learning for participants with members generally remaining patient and waiting behind the rider whilst also having a joke regarding it reassuring the participant.

Whilst the group ride tended to split up into a number of sociable groups along the ride, the ride leaders were generally able to manage this and prevent any significant splits in the group which would have required intense riding by those behind to catch up or a situation of riders being left behind at particular intersections. Whilst the single file riding was less sociable, it was only temporary and reactionary to when social bunching wasn't possible. It did however aid social bunching in bringing the wider group back together at times. This enabled a general reshuffling of the group when the ride resorted back to its social formation, providing opportunities for riders to cycle further up the group or to drop back a bit and engage with others along the ride. Whilst the front of the ride was predominantly male and the back predominantly female when regrouping occurred those who had been at the back were not tired or out of breathe, implying that there wasn't a difficulty in keeping up with the speed of the ride but rather the structure of the ride enabled different paces and intensity of riding to take place within the same ride, allowing participants to find a pace that they were comfortable within the group.

8.3.6   Traffic-Free Cycling - Disjuncture with On-Road Cycling

The rides provided a strong association and connection to leisure based riding that lacked engagement with elements of utility based riding. This was largely through the heavy reliance upon the material infrastructure of the NCN and the lack of use of the general road network as material infrastructure for the rides. Road sections that were used were sections of the NCN, which are described as roads with "low traffic flows and speeds which make them safe for cycling" (Sustrans, n.d.). One particular route, the 'City Parks' route provided a distinct cycling performance on the social rides that highlighted a disjuncture to previous cycling performances. Whilst social rides usually follow the NCN, along river sections travelling generally east and westwards, the City Parks route aimed to take in various parks around Newcastle and involved travelling in a more north and south direction. Between visiting various parks, the group had to tackle an unusually high amount of road sections. At busy intersections such as Byker high street, it was assumed that it would be easier to negotiate by dismounting and walking rather than attempting to cycle.

Got to Byker high street and instead of continuing cycling and adopting a vehicular cyclist performance we dismounted, reverted to pedestrians and wheeled our bikes across at the traffic lights. We got back on our bikes in the less busy streets. When turning right further down the street, many of the cars behind and on the opposite side of the road allowed us to keep in one large group but many participants kept close to the curb until turning with the ride leaders instigating when it was possible to cross, positioning their bikes strategically across the road in order to do so. (Fieldnotes, 2017)

Referring to Aldred and Jungnickel (2012), in these instances the rides disrupted usual traffic flow and speed, slowing motorists down and in certain circumstances stopping the traffic. However, much of this disruption was largely instigated by ride leaders in order to keep the group safe and together. The group was largely signal file and tight to the curb, contrasting to Aldred and Jungnickel's 'convoy formation' in taking up similar amounts of space to that of a bus in one of the lanes of traffic. Whilst Aldred and Jungnickel argue that such rides disrupt and alter the use and value of the road, these leisure rides were somewhat juxtaposed to this with participants and ride leaders very cautious in trying not to compete with motor vehicles, acknowledging that power lay with the car. This was emphasized in directions provided by ride leaders before certain sections of the ride or after road sections when the ride would re-group:

Ride leader commenting, 'If there's a car coming round they won't stop for you, left onto the road and then right at traffic lights'. Very serious and clear instructions to participants grouped together before tackling a road junction. (Fieldnotes, 2017)

'If you're on the road can you stay on the left hand side, you're liable, stick to the rules of the road when cycling on the road.' (Fieldnotes, 2017)

In moments along the ride, participants cycling performances along traffic-free sections would continue onto the road, with Figure 8-9 evidencing a rare example of such moments. Participants would continue to cycle two abreast in certain instances, talking with another and maintain a sociable nature that meant using the majority of the road space. In these moments the road space did become re-appropriated, similar to that on the traffic free paths, a sociable space, slowing down traffic and through social bunching riding, creating a difficult object for

266

cars to overtake or stopping traffic in the opposite direction in narrow streets. However, ride leaders would remind participants to the rules of the road, their liability and to remain alert and aware in their surroundings, reprising their role of maintaining a level of duty and care on behalf of the riders, something that I myself experienced:

> Around Ouseburn I ran a red light not realizing it. Jack had to tell me its gone red and to hurry up. I lost focus, the rides are generally on traffic-free routes and therefore tune out of various interactions and awareness's. (Fieldnotes, 2017)

The unfamiliarity, lack of understanding and experience of road infrastructure resulted in stoppages to the ride, consistently corralling the group after traffic lights and regrouping before being given instructions in what to expect in upcoming sections of the ride. As a result, the City Parks ride was rather staccato in its rhythm when transitioning between off-road and on-road infrastructure, stopping before road sections and being informed of the following directions and actions to take. This required participants to cycle at two paces, with on-road sections evidently being higher in intensity before participants eased off once cycling through parks or on the NCN. As a result, participants were somewhat more visibly tired.

Figure 8-9 Social bunching continuing onto road network

This lack of knowledge and experience of cycling on the road was further apparent when a number of participants who used their own bikes on the rides would transport their bike in the boot of their car. Bikes would be loaded into the boot of a car, taking off the front wheel if necessary.

> Gentleman with the Raleigh puts his bike in the car, says that free parking in the grey big car park is great, 'you can chuck the bike in and get to the Hub.'
> (Fieldnotes, 2017)

Whilst the majority of participants only attended the cycle rides themselves, one member, 'Jack' spoke about how he generally attempted to cycle with either his daughter or granddaughter. On a couple of occasions he brought his daughter along to the rides and spoke of his desire to buy a Brompton so that he could put that and his own bike in the boot and bring it down to The Hub for a bike ride with one of them. He discussed how outside of the Monday afternoon and Saturday rides he would bring the car down with the bike in the boot and cycle along parts of the NCN. When questioned about other performances of cycling in his everyday life, he commented on the difficulty of cycling up a large hill to get to his house whilst also drawing to attention that his house isn't near to a NCN route in which he could cycle along. As a result, Jack, like many others, relied on the NCN for such cycle performances, something that I now turn to.

8.4 The Cycle Hub and NCN – Leisure Cycling's Material Assemblage

The final section of the chapter explores The Cycle Hubs connection to, and use of the NCN. As Shove *et al* (2015, p.280) outline, infrastructures often link different places and are therefore 'connective', having both entry and exit points (usually more than one of these). It is argued that the Hub utilises the existing urban recreational cycling network of the NCN and as a result, these two particular pieces of infrastructure amalgamate creating a strong material assemblage that enables recreational cycling performances in and around the Newcastle conurbation.

The Cycle Hub values the National Cycling Network highly, acknowledging that by being on not one but two cycle routes The Hub benefits from continual passing trade. The Millennium Lottery fund provided a mandate for Sustrans in 1995 to create a 5,000-mile cycle network within 10 years (later titled as the NCN). When discussing cycling with The Cycle Hub

stakeholders, it was assumed that the Cycle Hub primarily serviced the NCN with leisure based cycling in mind. A number of attractions stakeholders drew attention to users of The Hub generally visited throughout the Tyne and Wear related to the reliance on the NCN:

> "We're right on two national cycle routes as you probably know, err so I suppose the favourite route for most people is out to the coast, especially when the weathers nice, so a lot of people go to Tynemouth and back or alternately you can go to Wylam, Corbridge or even just round the Ouseburn valley now and into Jesmond Dene. Depending how long they want the bike for and what they want to use the bike for. We do get a lot of people head to sections for Hadrian's Wall as well, say people interested in, we get a lot of people coming over specifically to do the Hadrian's Wall, their obviously interested in archaeology and that sort of thing, so it's a mixture. We don't tend to get that many people heading south of the river as much, occasionally out to the Angel of North, that sort of the thing, but I'd say the most popular route is straight out to Tynemouth and back." (The Cycle Hub, S4)

During its formative years, much of the newspaper articles reporting the development of the NCN in and around Newcastle during the late 1990s and early millennium related to a recreational focus. The construction of these cycle-paths focused more on the economic benefit recreational cycling provided, generating income for 'tourism' for the area with some of these inter-urban cycle routes bringing in £500,000 in two months, as claimed by Sustrans (Henderson, 2000). With Sustrans capitalising on these former railway sites, the NCN provided the individual with 'splendid views' or the local area whilst also providing a 'fine habitat for flora and fauna' (Kelly, 1987). They also provided access to significant sites throughout Northumberland and Cumbria such as Hadrian's Wall. A Sustrans Stakeholder at the time of its development recalls the NCN's impact for local communities and its value in facilitating recreational based cycle tourism:

> "The big thing about the Coast to Coast route, the businesses particularly rural businesses sprang up as a result of it. People, farmers particularly after foot and mouth in 2001 got grants for diversification and would turn their old stone barn into a bunkhouse or a tearoom… And other businesses sprang up providing support and luggage transfer, mini bus and break down services. I think that

helped, it actually helped enormously, the initial stages, I always remember the Northumbria Tourist Board being fairly dismissive. They would see cycling as poor man's tourism… their dream would have been to have a Geordie Disney Park rather than a cycle route and we really struggled to get money out of them in the first instances because they didn't see it as very prestigious tourism." (Sustrans, S1)

This early association to cycle touring and leisure based cycling has somewhat continued with The Hub reflecting this provision of service for such cycling performances:

"Yes, yeah I mean they are, I mean at one point it was almost the Sea to Sea was the only one at one point nationally, but that's growing more and more each year, we get quite a lot of groups coming through each year, some are doing it, its almost like where people who work, who get themselves a erm some kind of money raising thing to kind of, they do the great north run, the London marathon now people are doing the coast to coast route, a fundraising activity through people at work or groups of friends, so we get a lot of groups doing that but not only that a lot of people now have done the coast to coast, their looking at the Hadrian route is becoming as popular now." (The Cycle Hub, S4)

"When in the summer you get a lot people doing the coast-to-coast or Hadrian's cycleway because we are on that route." (The Cycle Hub, S1)

"People will hire the hybrid who are doing the coast to coast route that sort of thing will hire them off us, arrange to get themselves taken or go by train to the west coast and cycle all the way back. Or sometimes do the other coast and castles route up to Edinburgh as well." (The Cycle Hub, S4)

The Cycle Hub therefore associates itself with these recreational based cycling trips in providing a stop off point for users of the NCN, as well as providing varied services that they may need, or indeed services such as bike rental that enables new carriers of cycling to engage with recreational based performances on and along the NCN.

Whilst The Hub engages with and contributes to the continuation of these recreational cycling performances, it also somewhat lacks in contributing and promoting commuter and utility-based variants of cycling. This again can be somewhat connected to the NCN and its

270

criticism that it lacks quality connection to key spaces of practice such as the home, school and places of work. However the assumption that the NCN was built and designed predominantly focused on leisure practices can be a somewhat misguided assumption. The 1982 'Study of Disused Railways in England and Wales. Potential Cycle Routes', a national study by John Grimshaw and Associates (who was a key member in what was then known as Cyclebag and would later become Sustrans) and the Department of Transport originally envisioned these railway bike paths providing separation from motor vehicles within urban areas, providing "traffic-free cycle routes for journeys to work, school or shops" (John Grimshaw & Associates and Department of Transport, 1982, p.iii). These railway paths (to be turned into cycle paths) wouldn't be isolated, on the contrary:

> "*Development and use of land in the vicinity of the railway route.* Wherever possible, new and existing uses should be encouraged to relate directly to the bike path. Links should reach into housing and shopping areas, and all weather paths built into the schools. Some new developments should be of a kind that will both generate and attract users to the path. For example, a Leisure Centre would enhance the route far more than the ubiquitous warehousing. It does not matter how much of the railway land is taken up by these developments, provided always that space for an attractive and continuous route is left available. In the course of time, it might be possible to envisage the town turning away from its trafficked roads and facing on to its linear railway park and bike path" (John Grimshaw & Associates and Department of Transport, 1982, p.51).

Critically, what is now the NCN was to be interconnected into the everyday practices of people's lives. It was assumed that 'river valleys, canal towpaths, bridle paths, or minor roads' would cross the railway lines, in which these could be improved or developed as extensions and links into this network (see Figure 8-10). And whilst '[D]isused railways are where they are' and not conveniently located along proven and existing cycle routes, they would provide 'absolute segregation from road traffic' (John Grimshaw & Associates and Department of Transport, 1982). The potential role of these bike paths were to provide a safe cycling environment for children; a place to train 'tomorrow's cyclists, relating specifically to those who have a pre-conceived fear of traffic conflict on main roads and therefore 'gain confidence in their abilities'; as well in some cases becoming an attraction in their own right with the public driving (if necessary) in order to cycle recreationally (John Grimshaw &

Associates and Department of Transport, 1982, p.65). Today, customers of The Hub commonly reflect on their rides, citing such reasons for using the NCN. One user commented; "I try to keep off the roads, try to keep on the railway lines." (The Cycle Hub, U3), whilst a stakeholder of The Hub provided general reasoning that "once they're here they've got a completely traffic free route, well mainly that way. So, it's a nice, it's a nice pleasurable experience" (The Cycle Hub, S1). For some customers of The Hub who primarily cycle on the road network as part of a road cycling group, they too refer to road and traffic issues on their rides and as a result attempt to mitigate this by scheduling their rides at particular times in the day around rhythms of heavy traffic such as rush hour:

> Well, [I] try to get out a couple of times a week yeah but don't commute on a bike, it's far too dangerous... I'm exclusively on the road so yeah, you do use similar routes I suppose if you're commuting but it's a lot quieter. (The Cycle Hub, U2)
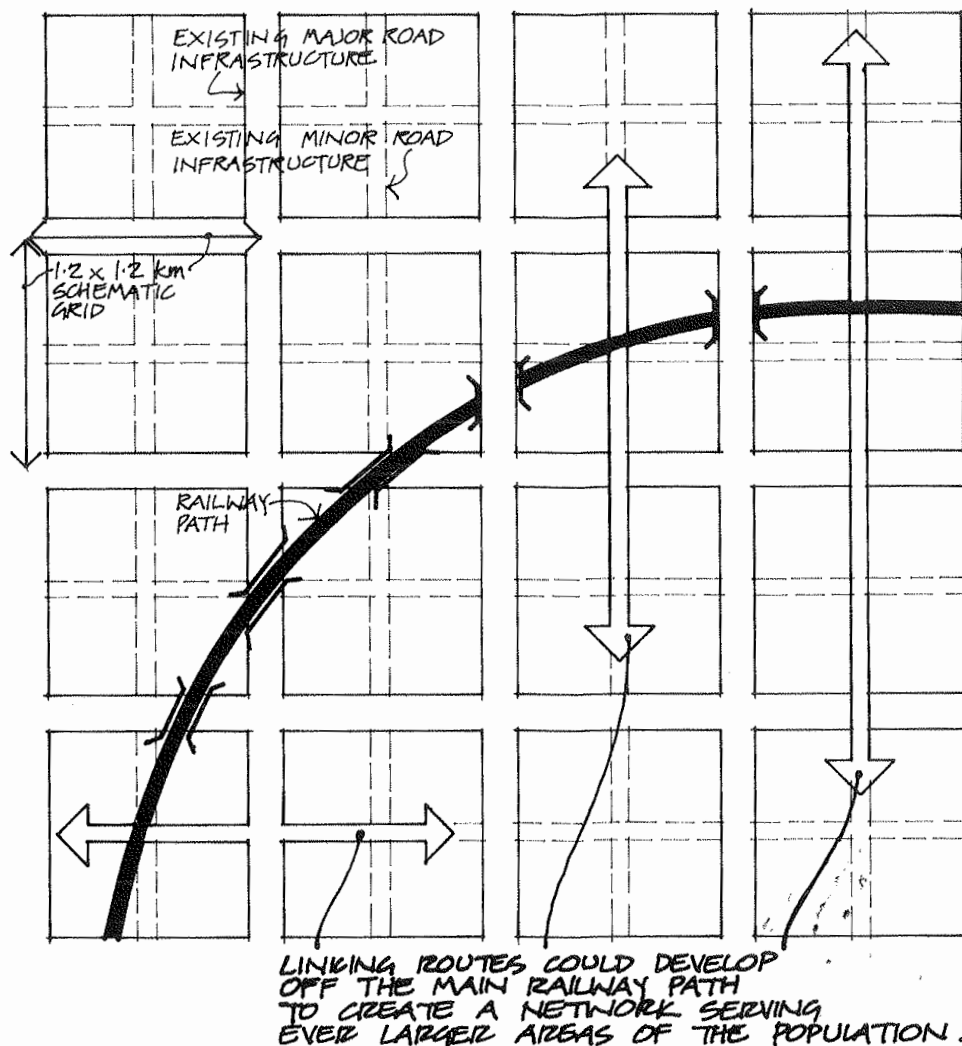
Figure 8-10 Development of routes linking with a railway path (John Grimshaw & Associates and Department of Transport, 1982, p.64).

Customers of The Hub therefore reflect the NCNs original aims to a certain extent, but these are only ever commented in relation to recreational performances of cycling. A Sustrans stakeholder involved in the process of converting these former railway lines in the northeast at the time reiterated the vision of the railway line providing a nucleus of a cycle network in which further advancements would connect into the NCN, but draws to attention its ultimate failings in becoming an 'isolated corridor':

> "I always saw the main routes being the sort of the branches, sorry the trunks, and
> the rest branches off that. And if you looked at say for instance a route along the
> Tyne from the city centre to North Shields then you would [have] links off to

273

Byker and links off up the coast to Whitley Bay rather than them being isolated corridors." (Sustrans, S1)

Whilst the off-road routes, conceptualised as the 'trunk' of the cycling network of the NCN proved easy to implement, the creation of on-road infrastructure, the 'branches', turned out to be politically difficult to create. Partnership funding from relevant local councils was needed in implementing and the development of plans for on-road cycling provision was seen to snag with more bureaucratic measures of the local council.

> "[Name] was a qualified traffic engineer, but we took on a couple of traffic engineers to tweak the details for town and city centres and produced a series of guideline manuals on how to build routes in urban areas which we thought would be a lot more than just painting red and green lines on the tarmac, you know proper dropped kerbs, proper two way working and that became a different branch of Sustrans but because we never owned the land in those cases, we had less freedom to do what we wanted and local councils were of course governed by very stringent highway standards… So progress was a bit slower there and local authorities got on and did those themselves." (Sustrans, S1)

As a result, customers of The Hub regularly comment on this disjuncture between the NCN and the more general road network, highlighting its isolation and thus its linear element as a 'corridor':

> Cycling along the NCN, I mentioned to the three women I was cycling with that I was surprised there was a Marina at North Shields. One woman said her partner, who cycles on the roads with a cycling club a lot was very surprised as well that there was all these routes like route 72 and was unaware of them previously (Fieldnotes, 2016).

The quote refers to this distinction and disjuncture of the NCN and more broadly the motor network. Whilst the off-road cycle routes are viewed favourably by customers of The Hub they also identify the road network as facilitating cycling practices, broadly road cycling or as something that is not conducive for them. As Shove *et al.* (2015) comment, infrastructural development is implicated in wider systems of practice dynamics. It is evident that the Cycle Hub is reacting to a trend in its wider surroundings of particular meanings of leisure, health

and fitness. As a result it is these meaning constructs that become emphasised and enmeshed in the practice of cycling and further appropriated and promoted by The Hub.

8.5   Conclusion

In this chapter I have traced and assessed The Cycle Hub's contribution to cycling practices. Utilising the three-element model of practice theory (materials, meanings and competences), I have argued that The Hub contributes to a recreational cycling culture in Newcastle.

I have argued that The Cycle Hub introduces a new kind of cycle infrastructure, which attempts to provide a positive experience and environment of cycling. It attempts to disassociate itself from stigmatised performances of cycling making it accessible and detached from any potentially negative meanings. Through the implementation of a café, practices such as having a coffee and cycling become co-located in space at the Hub. By utilising a practice such as having a coffee and situating it within a broader cycling aimed infrastructure, these practices become entwined. As I have argued, the use of imagery and artefacts throughout The Hub as well as the social rides created associations to and connections with leisure based performances, evoking and associating to meanings of health and social wellbeing. These meanings, of cycling were particularly evident in the social ride performances. As evidenced, the social rides developed performances of social bunching which the wide traffic-free paths of the NCN enabled, along with ride leaders. Such cycling performances were relaxed with potential stress and extra duties and roles handled by either the ride leader or the materiality of the bike.

I argued that the element of competence was closely associated to the materiality of the NCN. Whilst riding performances were largely sociable, this was juxtaposed to the road environment where participants lacked knowledge and experience to competently cycle on the road. The rhythm of riding became more intense and as a result the meanings associated to cycling by The Hub became somewhat eroded and not as sociable.

The social rides advertised and promoted at The Hub engaged in a process of developing the rider's skill. Viewed as enabling individuals to go from not cycling or cycling very little to cycling regularly, such knowledge and competence of cycling was closely associated to the use of and reliance upon the NCN. Cycling performances observed highlighted associations to sport and active exercise. The prevalence of such clothing grew as the difficulty of social

rides grew. Whilst riders on the easier rides wore everyday clothing, the longer rides displayed use of active wear clothing. Whilst this was cycle specific, other cycle users of The Hub would generally engage in wearing lycra clothing of various forms.

The material assemblage of The Hub and the NCN creates a further association to and promotion of recreational forms of cycling. I have highlighted the NCNs historical development as a cycle network that intended to challenge automobility and the existing road network, but it has subsequently become synonymised as a leisure route. With The Hubs awareness of the importance of the NCN I have argued that The Hub has further contributed to the popularisation of recreational based cycle performances.

9   Analysis Chapter

The three social sites of Tynebikes, The Cycle Hub, and The Newcastle Cycling Campaign are analysed with regards to their contribution and interventions to cycling practices. This chapter draws out the empirical material presented in the previous three chapters and utilises the theoretical framework of practice theory to structure it. The empirical research highlights four distinct contributions in understanding how cycling cultures are born, grown, maintained and possible decline.

In the first part of the chapter, I focus on how cycling practices are born, referring particularly to processes of building practices. Based on the empirical chapters of both Tynebikes and Newcastle Cycling Campaign, the importance of introducing new elements into existing cycling practices to promote cycling is highlighted. It is argued that in order to create new forms of cycling, interventions require a process of 're-crafting' existing elements. This draws to attention the potential decline and fossilization of cycling performances, most notably in this research, vehicular cycling. With new elements introduced it is argued that other elements are re-crafted or fall out of use, thus particular performances are undermined and deconstructed. I then draw to attention how such interventions are situated in wider systems of practices. In the case of building new cycling practices, stakeholders are engaged in the wider system of velomobility and in opposition to, and competition with, the more dominant system of automobility. While both campaigns perceived that the introduction of infrastructural material would build cycling practices, their advocacy approaches generated two distinct trajectories of cycling. Rather than building and recrafting elements, Tynebikes contributed to a maintenance of existing practices, while Newcycling's introduction of new material elements posited the adaptation and re-crafting of competence and meaning elements.

In the second part of the chapter, I turn to the process of recruiting people to cycling. Here I reflect on The Cycle Hub's approach of 'combinatorial innovation', an approach that integrates existing elements in new and alternative ways. I argue that The Hub re-appropriates the idea of a cycle café for 'hard-core cyclists' to one, which is neutral and welcoming to a wider constituency. And secondly, The Hub couples competence and knowledge development on social rides with the materiality of the NCN to produce a distinctive form of leisure cycling. The second part of this section refers to another process of

recruitment through 'cross-fertilisation'. But I argue here that whilst both The Cycle Hub and Tynebikes perceived a natural transition from leisure based cycling to utility and commuter forms of cycling, this perception under-estimated the complexity of cycling practices. Fundamental differences of cycling infrastructure and the associated meanings attached to such complexity consequently inhibited potential cross-fertilisation from leisure to utility cycling.

Both the third and fourth sections of the chapter focus on cycling carriers and stakeholders themselves and their subsequent influence on trajectories of cycling. In section three I highlight when new individuals engage in cycle politics with different experiences of cycling, they have the opportunity to shape future practices in alternative ways. Here I contrast the two campaigns, with Tynebikes displaying a conservative approach to cycling practices while Newcycling pushed for change. This is further emphasised in section 9.4, which explores a process of maintaining cycling practices through ideas of communities of practice. While policy often concerns itself with attempting to grow cycling, this section highlights how Tynebikes maintained cycling performances through the circulation of rules, norms, knowledge and competences, circulated primarily through newsletters. However, whilst this maintained existing cycling practices it also alluded to the level of commitment required to perform practice of cycling.

9.1   Building Cycling Practices through Material Change

This section focuses on the two campaigning organizations that directly lobbied for material, infrastructural, change. As a cycling campaign and advocacy group Tynebikes can be viewed to not only campaign for a better environment which would be conducive for cycling but also encouraged a new population to take up cycling. However, on viewing this campaign, whose main emphasis and activity was during the 1980s and 1990s, their lack of success in significantly growing cycle usage was evident. The campaign group may have aided a persistence of cycling practices by a minority of carriers who were already enrolled in cycling, although this is clearly difficult to prove.

When considering change in a practice, the production and introduction of new elements into existing performances through particular interventions creates implications for other elements that circulate within the practice (Watson, 2012). This co-evolutionary change in elements of a practice is critical for the alteration and evolution of that practice, something that provides a

distinction between Tynebikes and Newcastle Cycling Campaign. Both social sites campaigned to alter practice as entity to an 'ideal type' by projecting visions of what cycle performances should look like in relation to the materiality of cycling practices. Whilst both cycling campaigns envisioned and campaigned for better and safer cycle infrastructure, the trajectory of these cycling practices differed significantly as Tynebikes focused on building a practice that maintained its familiar elements, whilst Newcycling emphasised the building of new elements that would radically alter and re-craft cycling practices.

Consequently this had an impact in considering the trajectories of building cycling practices as incremental in Tynebikes' case and systemic in Newcyclings'. As a result it is argued that both processes reveal a competitive relationship with the 'system of automobility'. Whilst Tynebikes sought to build practices of cycling within the system of automobility, it is evident that Newcycling sought to build a 'system of velomobility' in direct opposition to the system of automobility, as well as attempting to deconstruct the competing system.

Whilst both campaigns sought to build cycling practices through promoting new infrastructure, such advocacy generated two distinct trajectories of cycling. In the case of Tynebikes, building material elements helped maintain existing practices, whereas Newcycling's introduction of new material elements posited an alternative trajectory of adaption and re-crafting of both competence-based and meanings-based elements of cycling practice.

9.1.1   Re-crafting Cycling: The Significance of Hard Infrastructure

Re-crafting practices refers to the alteration of elements of existing practices, systematically analyzing and intervening in the component elements of a practice (Spurling et al., 2013). As a result of this, practices change when new elements are introduced or removed or existing elements are combined in new ways (Shove et al., 2012). For both Tynebikes and Newcycling, the re-crafting of cycling focused heavily upon introducing new material cycle infrastructure which re-crafted cycling as a safer, more accessible practice.

The introduction of the new materials Tynebikes campaigned for did not result in or lead to a considerable change in cycling performance levels. In part this reflected the limited nature of the new materials but also reflected a lack of consistency in what was deemed suitable infrastructure by Tynebikes with the promotion of shared use of pathways, lanes demarcated

with paint on roads, advance stop lines, dropped curbs and use of bus lanes. Whilst Tynebikes perceived these materials to be considerable advancements in cycling infrastructure, they failed to capture non-cyclists as the value of these new elements were not accepted by potential cycling carriers (Shove and Pantzar, 2005). Whilst there was no doubt that it was Tynebikes ambition to bring non-cyclists into cycling practice through the provision of material infrastructure by improving the perceived safety of cycling and provide space that legitimizes the bicycle in the road environment, this was subsequently not reflected in a mass take up of cycling.

In comparison, Newcastle Cycling Campaign's lobbying for new infrastructural elements in the form of a separated cycle network points towards a more radical re-crafting of cycling significantly beyond existing cycling performances in Newcastle. For them, for cycling practices to grow, infrastructural elements must first be changed. Newcycling's campaigning for new materials and their hard-line stance in holding out for the provision of such materials was considered 'radical' by other stakeholders. Newcycling adopted a critical view of the cycling material necessary for the growth of cycling practices. Constructing a network of separated cycling infrastructure introduced new meanings of convenience and safety, to potentially be validated by a wider cohort of cycling carriers. Due to the removal of interaction with motor-traffic through the provision of physical barriers such as curbs, Newcycling also envisioned a reduction in the skill and competence necessary to perform cycling.

Thus, in order for cycling to recruit new carriers of the practice, the introduction and alteration of new material elements is essential, specifically the provision of separated cycling infrastructure. With this stance, Newcycling's 'build it and they will come' vision stands in opposition to Watson's claim that the introduction of new elements does not stipulate a cause-and-effect relationship (2012, p.490). For Newcycling, something must be built first in order for alternative and new meanings of cycling to be accepted and the competence and skill necessary to be lowered. Watson (2012, p.491) further comments that it is difficult analytically to identify a single location of change to a practice due to the co-evolution of elements, but for Newcycling this single location of change with the introduction of materials has the ability to re-craft both the competence and meanings of cycling. Elements are not only interdependent but they are also mutually shaping (Shove et al., 2012, p.32) and in this respect Newcycling critically argued that the provision of separated cycle

infrastructure is the starting point of the mutually shaping process and a step change in recrafting performances of cycling. Figure 9-1 illustrates how the co-evolution of elements begins in this case with changes in the materials i.e. the introduction of separated infrastructure.
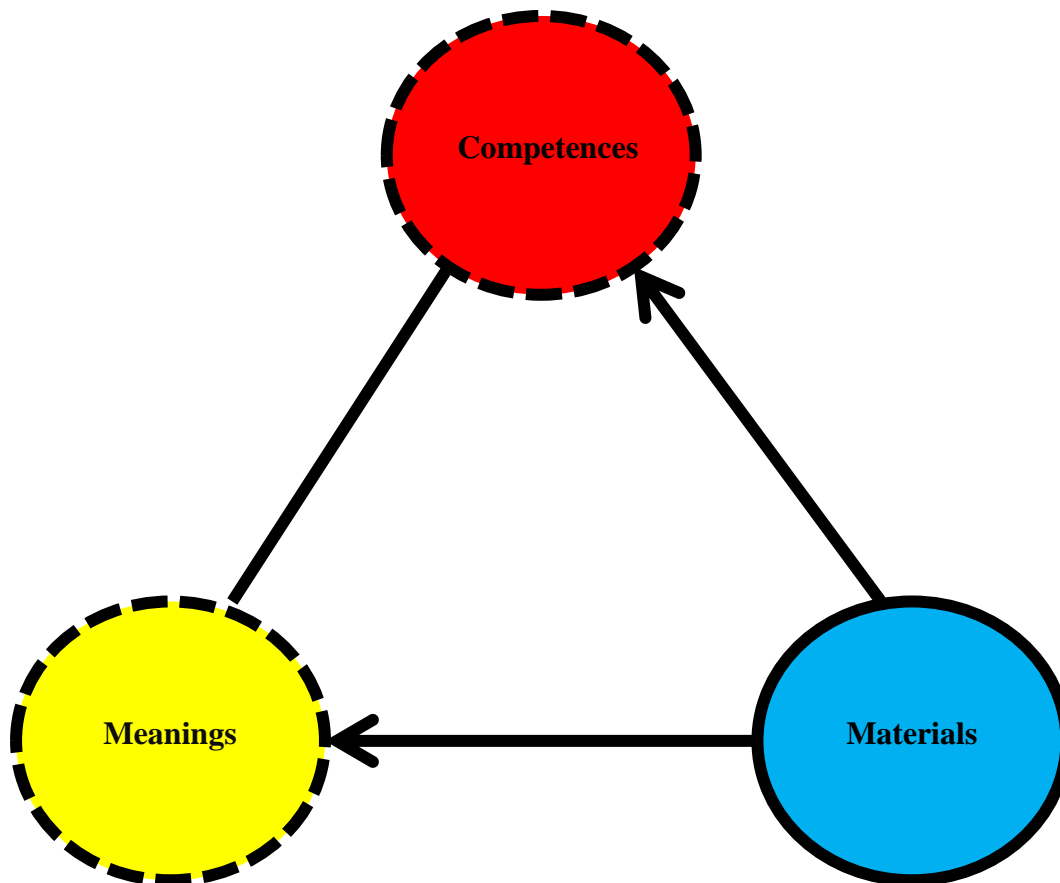
Figure 9-1 Infrastructure *re-crafts* meanings and competences

9.1.2 The Potential Fossilisation of Vehicular Cycling

The utilisation of the 'vehicular cyclist' performance by Tynebikes placed a larger emphasis upon the knowledge and skill to competently ride on the road, such as using various hand signals in which to navigate. In contrast, the provision of separated cycling infrastructure advocated by Newcycling seeks to undermine the value and necessity of such knowledge. Instead, the knowledge and skill generally attributed to vehicular cycling would become less valuable, even unnecessary, after large-scale separation. Rather than scripting the human actor with the competences needed, the introduction of separated infrastructure determines a new boundary of competence, which is lower than before, with meanings of safety delegated to the infrastructure rather than the cyclist. The knowledge and know-how of taking primary

position and how to switch lanes in motor-traffic becomes eroded and undermined. Thus objects and infrastructures determine boundaries of competence with certain aspects being delegated to the technology (Shove et al, 2012, p.59). Unlike Tynebikes trajectory of cycling practice, Newcycling envisioned performances of vehicular cycling to shrink and largely fall out of use in order to enable a wider cohort or population to access and perform cycling.

Hui's (2017) reference to the variation in the constituent elements of performances is emphasised here in showing how elements such as competence and materials varied in relation to their importance between both Tynebikes and Newcycling. Whilst both performances described and campaigned for by Tynebikes and Newcycling related to cycling as an everyday practice, such practices also differed. Whilst Newcycling emphasised the importance of materiality of cycling over that of competences and knowledge, Tynebikes perceived the opposite with the importance of knowledge and skills of vehicular cycling to counterbalance the lack of cycling specific materiality. What this shows is the flexibility of elements within the practice of cycling in which different combinations of elements subsequently characterise the same performance of cycling.

For Newcycling, the intervention of new material infrastructure, creating new combinations of existing elements, refers to the social-fossilisation in breaking existing combinations of elements. The intervention and evolution of cycling-as-entity with the erosion of vehicular cycling demonstrates how the common knowledge necessary to successfully perform utility/commuter based performances of cycling could potentially vanish (Shove et al., 2012, p.50). Shove et al. use this in the context of practices themselves becoming extinct and fossilised, replaced by newer technologies, which reconfigure practices around different materials, meanings and competences. But in relation to this research, it also demonstrates how particular performances of cycling, which rely on the combination of a particular set of materials, meanings and competences may be rendered obsolete as performances of cycling.

The importance of a cycle network further connects to this association of building new practices of cycling and the fossilisation of other elements. If separated cycling infrastructure was to be provided but lacked consistency on a network level, we can begin to see how vehicular cycling skills may still be vital for cycling performances. Rather than the necessary know-how of vehicular cycling lying dormant as a practice memory in the minds of existing cyclists (Royston, Daly and Foulds, 2014) an incomplete separated cycle network would

require moments in which such performances must be drawn upon and used in order to seamlessly and continuously maintain a cycling performance. It therefore would remain valuable to existing cyclists through the ability to draw upon such knowledge and competence, whilst also remaining as a barrier to other potential new carriers in representing and demanding a particularised performance of cycling in Newcastle. As a result performances such as vehicular cycling would continue to undermine the potential expansion of cycling performances and arguably rather than altering practices, it would merely maintain existing cycling cultures.

This further relates to the 'dissolution' of practice bundles through overwhelming or large-scale change, which doesn't imply destruction to a practice (Schatzki, 2013, p.42). Destruction would refer to eliminating material locations needed to continue such practices or inducing massive responses from people that would lead them to abandon such extant bundles for the emergence of new ones. Rather, dissolution is a matter of smooth development from predecessor bundles that embrace large, rapid, or cascading changes, thus generally resulting in a linked and simultaneous dissolution and emergence. In relation to vehicular cycling therefore, the dissolution of vehicular cycling is replaced with the emergence of new cycling bundles that relate to safer and more sociable forms of cycling. The future development of the separated network is therefore critical in determining the competences necessary in the bundle and therefore the likely growth in cycling practice.

9.1.3   *Practices in Competition*

As Shove et al. (2012, p153) comment, qualities of cycling are considered in relation to other forms of mobility. Thus, cycling being perceived as slow or dangerous are relative when cycling takes place in environments that are designed for the car and when daily routines involve travelling distances only made possible by the car. Cycling therefore no longer becomes convenient, quick or safe as interpretations of cycling depends on how riding is "positioned within and by an interdependent network of social and material arrangements" (*ibid*). In considering this, I argue that Tynebikes and Newcycling approached the building of a system of velomobility in two distinct ways. While Tynebikes were concerned with building cycling practices within the broader system of automobility, Newcycling positioned the system of velomobility in direct competition to automobility in the aim of creating a more equitable and inclusive mobility network.

Tynebikes' and Newcastle Cycling Campaign's lobbying for improvements of cycling practices in regards to the development of new cycling infrastructure refers to the development of the 'system of velomobility'. Just as Urry refers to the 'system of automobility' (see Chapter 1.1.1), the car and indeed the bicycle are only one component in a socio-technical arrangement. As Watson highlights, process of change are rarely entirely reliant with the practice concerned, "rather they arise because of the shifting relative location of a practice within broader *systems of practice*" (2012, p.491). Thus, the dominance of the system of automobility and the perceived need to drive is through the flow of practices, which constitute and compromise it (Watson, 2012, p.492). In considering systems of practice, I widen and acknowledge the wider patterns of practices which come to constitute and form performances or non-performances of cycling. As Macrorie, Daly and Spurling (2014, p.17) argue, practices are produced and held in place by multiple, and sometime seemingly unrelated, infrastructures, institutions and policy domains". This is particularly pertinent for Newcycling and there council-facing approach. While Newcycling were identified as a radical lobbying campaign, in part to their rigid lobbying approach and strict emphasis on the council structure, this does highlight where the group considered alterations of practices must take place. Rather than concerning themselves with the specific practice of cycling, Newcycling identified the broader dynamics of systems of practice in which carriers of cycling were caught. As highlighted in Chapter 7.3.4, Newcycling identified that that the councils technical ability in terms of technical highway engineering and technical transport planning 'wasn't up to scratch', with cycle specific schemes lacking sufficient cycle provision. The organisation of 'training for cycle infrastructure design' sessions as well as the campaign offering their technical expertise through their networking and knowledge of wider national cycling schemes and measures aimed at re-educating key practices of engineering and planning. As Hughes (1993, p.465 in Shove et al., 2012, p.154) argue:

> "Attempting to reform technology without systematically taking into account the shaping context and intricacies of internal dynamics may well be futile. If only the technical components of a system are changed, they may well snap back into their earlier shape like charged particles in a strong electromagnetic field. The field also must be attended to; values may need to be changed, institutions reformed, or legislation recast."

In regards to the cases of Newcycling and Tynebikes, this 'snapping back' to an earlier shape can be considered as interventions of cycling and performances of engineers and planners reverting back to previous performances dictated by the system of automobility. Whilst the investment of CCAF1 and CCAF2 may have contributed to the development of sections of the SCR outlined in the 'Delivering Cycling Improvements in Newcastle, a Ten Year Strategy (2011-2021)', unless new materials, meanings or competencies are circulated and acquired by engineers and planners, this snapping back to a previous system is likely. Shove et al. (2012) comment that while investment in cycling infrastructures does not guarantee the capture of willing carriers, it does shape the requisite elements. Taking this further, it is important to consider how investment in such cycle infrastructure must also shape elements throughout the system of practice. Indeed, this was highlighted by Newcycling when commenting on a threshold that the campaign hold the council to when reviewing traffic regulation orders. Whilst some passed this threshold that the campaign then subsequently supported, Newcycling were still aware of transport interventions that fell short of this threshold. Furthermore, policies that aligned with a transport transition and a more equitable access to the city were also in conflict with other policies, which emphasised a business-as-usual traffic management approach. These examples provided moments where such 'snap-back' to previous practices which 'relieved congestion', 'improved junction capacity' or 'smoothed traffic' resulted in the switch back to a perpetuation of the car-system. Therefore, while time-specific investment such as the CCAF may provide opportunity in investing in elements of cycling practices themselves, Newcycling also emphasised the necessity to change elements in wider practices that contributed to and configured cycling practices in order to prevent any potential 'snap back' to earlier planning and engineering practices in the future.

Incremental and Systemic Interventions

As previously explored in Chapter 6.4, Tynebikes material interventions were associated to intersection modifications, alterations that whilst altered cycling performances in some way, it did not amount to surpassing a perceived threshold of significantly altering cycling performances in Newcastle. Along with the popularisation of vehicular cycling techniques, Tynebikes' intervention technique is conceptualised as somewhat incremental. Incremental changes can enable processes of positive feedback, yet the effects of which are unpredictable in regards to their extent (such as the scale of recruitment) and depth (such as how firmly

configuration become embedded) (Shove et al., 2012, p.156). Subsequently for Tynebikes these were somewhat limited.

Tynebikes established that elements already in circulation and small incremental alterations would enable a positive feedback loop to building a new cycling practice. But in doing so this perception highlighted a dominant relationship of the system of automobility over the system of velomobility. Tynebikes referred to the development of cycling practices within the system of automobility. With automobility being the prevailing mobility practice, incremental interventions advocated by Tynebikes sought to grow cycling within the system of automobility. As highlighted in Chapter 6.3.1, particular lobbying was not necessarily concerned with decreasing the use of the car, with them accepting a proposed ring road would serve more motor traffic outside the city centre area, but rather to do with cycling's omissions from the plan. While Tynebikes' 1990s campaigning approach referred to an anti-car rhetoric, very few interventions were made to inconvenience driving practices. Figure 9-2 therefore highlights this relationship between two competing practices of driving and cycling in regards to the systems of automobility and velomobility. A limitation of such an approach is the on-going maintenance and renewal of driving performances. As a result, and in the case of Tynebikes, whilst it was envisioned that cycling practices would grow, the subsequent outcome was the lack of reconfiguration between the two practices, with the system of automobility remaining dominant over the system of velomobility and thus dictating the opportunity (or lack of) for cycling performances to grow.
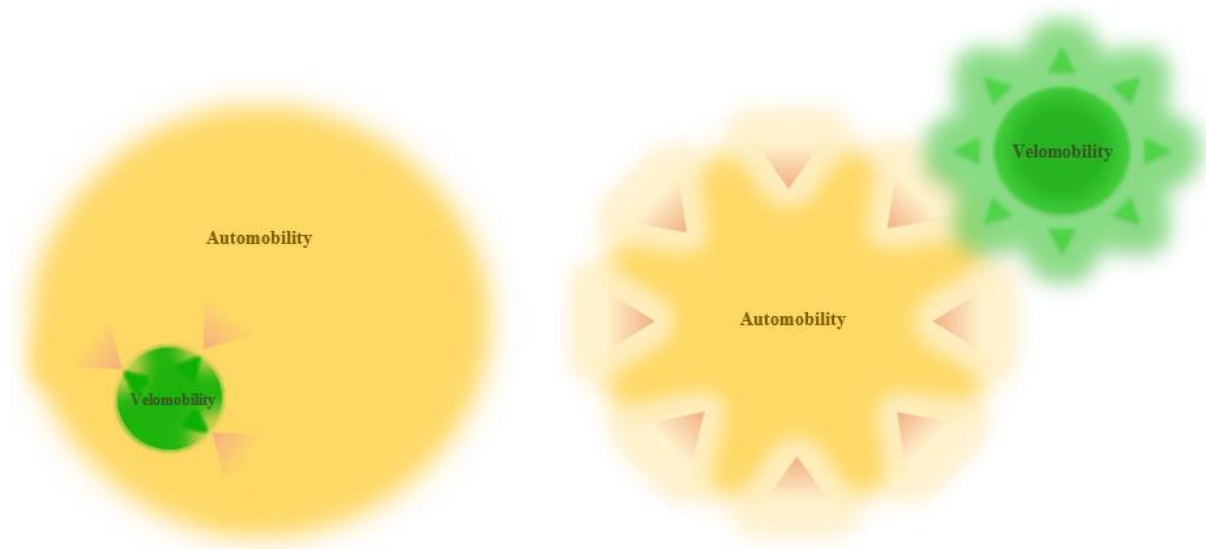
Figure 9-2 Building the system of velomobility within the system of automobility (left) and building the system of velomobility in competition with the system of automobility (right)

Newcycling however, acknowledged the necessity of attending to the disappearance and erosion of elements associated with driving in the aim of breaking the links, which hold these arrangements in place (*ibid*). Therefore, their support for the Space4Cycling campaign not only advocated for the provision of space for cycling, but also the reduction in provision for cars use. Road dieting, space definition, neighbourhood zones, safe junctions and crossing, and speed reduction were all building blocks that sought to break links and undermine performances of driving. This approach is relational to Shove's 'transitions-informed analysis', in which she states:

> "If lower carbon ways of life depend on reinstating arrangements that have been displaced by new more resource intensive forms, a further strategy is to deliberately dislodge these incoming regimes. Framed in this way, transitions towards sustainability might entail radical disruption. This might mean directly attacking systems of automobility, or figuring out how to unmake suburbia and suburban ways of life as a means of reinstating the bike." (Shove, 2012, p.373).

What is evident here then in regards to Newcycling is not an evolution through minor adjustments of the current system and its practices but rather the creation of a largely new system. Significant alteration of materials would considerably realign both competences and meanings towards a trajectory that would capture a considerably larger cohort of people

currently not engaged. The systems of velomobility and automobility are thus in direct competition with one another, with the emphasis of a dualistic relationship of deconstructing driving practices, whilst building cycling practices (Figure 9-2).

Cycling Practice History in Newcastle

It is also important to consider the scope and potential impact of interventions may be born as a result of 'catching' practices at different moments in the practice's (local) career (Shove et al., 2012). Whilst both Tynebikes and Newcycling experienced similar base rates of 2% - 3% cycle use (see Figure 5-1), the local policy contexts were different. For Tynebikes, Newcastle City Council's approach was not to encourage cycling, with Tynebikes having to consistently legitimise cycling as a mobility and provide evidence of the need for further cycle provision. Whereas, Newcycling were able to draw upon and hold the City Council to account in relation to a number of policies that supported investment into cycling as a sustainable alternative to automobility. The growing awareness and concerns about the environment led to a wider societal discourse of sustainability and the need to identify more energy-efficient or less energy intensive practices that Newcycling could draw upon in comparison to Tynebikes. As a result, the ability to undermine the system of automobility in politics for Newcycling was more feasible in comparison to Tynebikes.

We can also see how campaign practices interact closely with council practices and co-evolve. This is evident when referring to cycling strategies and policies throughout the periods of Tynebikes and Newcastle Cycling Campaign. As Figure 5-7 conveys, cycling policy/strategy documents were published shortly after the establishment of the two campaigns. The 1984 report 'Cycling in Newcastle – The Opportunities' was published as a result of Tynebikes criticism of the 1983 City Centre Local Plan, whilst Newcastle City Council published a further two cycling documents: 'Cycling Policy and Plan' (1991) and 'Cycling Strategy' (1998) during Tynebikes high tide of campaigning. Indeed, the 1998 Cycling Strategy was instigated by a local councilor interested in public transport and cycling practices, whilst also being a member of Tynebikes. The strategy itself mirrors Tynebikes campaigning practice at the time positioning cycling as an alternative to the unsuitable growth of motorized traffic, which was less prevalent in the 1991 cycling policy and plan which epitomized Tynebikes difficulty of legitimizing cycling with 'Cycling Policy 5.4' outlining a tolerate but do not encourage approach to cycling (see Chapter 5.3). Similarly,

Newcastle City Council published 'Delivering Cycling Improvements in Newcastle, a Ten Year Strategy (2011-2021)' in 2011, shortly after the established of Newcycling and the petition for safe cycling infrastructure. In these cases, both campaigns not only stimulated the development of the documents through the subsequent pressure of their campaigning, but they also represented future cycling visions, stipulating to institutional bodies such as the city council what was deemed to be suitable performances of cycling. Such situations are explained in the literature on 'transition management' in which policy influence occurs through pluralistic networks in which actors from "government, the market and civil society participate in an interactive manner" (Loorbach and Rotmans, 2010, p.197). This positions policy making not as an activity focused on the task of persuading individuals to act in line with agreed behavioural goals, but as a reflexive process of social learning and network building in which "state actors rely upon non-state actors in the formulation and implementation of public policy" (Smith et al., 2005, p.1498).

9.1.4   Summary

Building cycling practices refers to material intervention at the level of practice as entity and was critical for both Tynebikes and Newcastle Cycling Campaign in their attempts to grow cycle usage. It was perceived that the introduction of certain infrastructural material would significantly alter the relationship between elements within a practice entity through the process of re-crafting. However, through the two examples of Tynebikes and Newcycling I can conceptualise that such interventions require surpassing a threshold in order to break and shift cycling practices. As explored, it can be assumed that whilst Tynebikes attempted to build cycling practices, their interventions failed to re-craft key elements and therefore surpass this threshold and as a result cycling practice-as-entity remained somewhat consistent in its configuration. Their undefined vision of a particularized network of cycling infrastructure contributed to a perceived lower material threshold deemed necessary to build cycling practices. This was in part due to the emphasis and perceived reliance of cycling competence as evident in the concept of the vehicular cyclist. Newcycling on the other hand considered material interventions that by Tynebikes standards were both politically and economically expensive. As Figure 6-5 referred to, Tynebikes rarely advocated for separated infrastructure as it was perceived that easier and cheaper options were sufficient in creating a safe cycling experience (that still included vehicular cycling) and thus would surpass a conceptual 'threshold' in recruiting new cycling carriers. For Newcycling, their perception of

the threshold in recruiting cycling carriers was much higher. A Social Practice Theory derived explanation of this situation points to the failure to significantly address either the competences required to engage in vehicular cycling or the meaning of cycling in environments dominated by fast vehicular traffic.

Whilst Tynebikes attempted to recruit new cyclists, the impact of their interventions resulted in a somewhat consistent and similar cycling-as-entity configuration. Tynebikes actions contributed to the reproduction of cycling performances due to the changes proposed being minor in nature, isolated and non-ramifying (Schatzki, 2013). Schatzki states: "the difference between stability and evolution is not definite. It is a difference between small, fewer, and non-ramifying changes, on the one hand, and large, frequent, or multiplying changes on the other" (2013, p.41). Whilst there is no metric that considers what changes are non-ramifying or disruptive, in the case of Tynebikes it can be assumed through historical cycling figures, that such material arrangements failed in having large and multiplying changes. Instead, it is argued that these interventions preserved pre-existing forms of competence and meanings associated to cycling. Such elements were either the same or similar to the existing cycling-as-entity bundle and therefore assisted in the persistence and reproduction of existing cycling performances. Consequently, this demonstrates a deficit in reaching a threshold of altering existing elements in order to re-craft the practice of cycling so that alternative performances were possible.

Here lies then the distinct contrast with Tynebikes in that the materials campaigned for by Newcycling would essentially create a considerably different performance of cycling to that of existing performances. In many ways these campaigning approaches are of their time. Tynebikes approach was consistent with other cycling lobby groups of the time. Newcycling by contrast were faced with a policy context more amenable to separation as an idea. That said, they were part of an emerging fringe of groups advocating for separate infrastructure and were part of this change itself. Their lack of pragmatism and consistency of stance did however likely lead to more radical material change in Newcastle and this is a story for other campaign groups to listen to.

9.2   Recruiting New Cyclists

Split into two sections, this part of the chapter introduces two approaches both The Cycle Hub and Tynebikes assumed would enable the recruitment of cyclists and thus grow cycling.

Of the three social sites, The Cycle Hub and Tynebikes actively engaged in the direct recruitment of individuals, whilst Newcastle Cycling Campaign viewed that the recruitment of individuals would be a result of such interventions they made.

The first section refers to the circulation and combination of existing elements in new and alternative ways by The Cycle Hub. As a result, The Cycle Hub innovates cycling practices through the novel integration of competence, meanings and materials in an alternative way. Firstly through the re-appropriation of the cycle café from a space for existing 'hard-core cyclists' to one that is neutral and welcoming, in order to engage with and recruit new individuals. And secondly, the learning of practical knowledge, in particular the embodied knowledge of 'know-how' at The Hub is coupled with the material infrastructure of the NCN, producing a distinctive form of cycling with techniques of its own.

The second section refers to both The Cycle Hub and Tynebikes, drawing to attention a common understanding that leisure based cycling would naturally lead to an uptake of utility and commuter based cycling. This understanding by both social sites refers to the process of cross-fertilisation, "the capability to establish connection and disconnections in and among practices" (Alkemeyer and Buschmann, 2012, pp.35-36). However, while this is possible, I argue that this connection was not successful in both Tynebikes and The Cycle Hubs case. Due to the complexity of cycling practices, the subsequent difference of elements between leisure and utility cycling and commuter cycling, most notably the competences that commuting demanded and the associated meanings attached to this, resulted in a lack of cross-fertilisation.

9.2.1   *Combinatorial Innovation*

Practices are formed and pieced together by necessary and sometime novel elements. The Cycle Hub as a social site of cycling provides valuable circulation and combination of elements, which contribute to performances of cycling, with a particular focus upon the recruitment of those who do not yet cycle. Referring heavily to Shove and Pantzar's article 'Understanding the invention and reinvention of Nordic Walking', I highlight two examples of The Hub integrating already familiar elements of cycling when innovating practices of cycling. Firstly, whilst cycling cafes are historically evident, The Hub reconfigured this material element by instilling meanings of health, wellbeing, socialness, and leisure. And secondly, the NCN as infrastructure provided an opportunity to draw performances of leisure

cycling into the city and was strategically utilised by the social rides in reaffirming a process of learning and developing competence. In what follows, I argue The Cycle Hub has innovated performances of leisure cycling through the novel integration and combination of competence, meanings and materials in their attempt to recruit new carriers of cycling.

Cycling as a 'Proto-Practice' at The Hub

The very strength of The Cycle Hub is that the social site provides a practice of cycling in a 'proto-practice' format. As Shove et al., (2012, p.24) define; a proto-practice refers to relevant elements existing but without being linked. The Hub circulates a number of elements as highlighted in Chapter 8 including:

- Meanings – As a locally new assemblage of cycling infrastructure, The Hub provided a positive atmosphere and environment of cycling. Disassociating it to other stigmatized spaces of cycling, imagery and artefacts presented throughout the café space, as well as social rides created an association to leisure based performances of cycling. Particular meanings of health and social wellbeing were enabled through social rides on the NCN allowing a relaxed and stress free experience of cycling.

- Materials – The provision of bike rental as well as being able to use these in conjunction with the social rides enabled participants to cycle without necessarily needing to purchase a 'device'. Members could also borrow bicycle helmets for free, whilst the bicycle workshop provided the ability to enjoy cycling without necessarily needing to have the competences of fixing a bike if any mechanical issues occured. A small cycle shop also provided opportunity to buy relevant cycling accessories.

- Competences – The social rides advertised and promoted at The Hub developed riders' skills, going from not cycling, or cycling very little, to cycling regularly. The knowledge and competence of cycling was closely associated to use of the NCN. The provision of a bicycle workshop and cycling information, in particular maps and other rides, further assisted in enabling performances regardless of knowledge of maintaining a bicycle or being aware of suitable cycle routes in the local Tyneside conurbation.

Elements of cycling may circulate widely but are pieced together in a manner that is informed by previous and related practices (Shove and Pantzar, 2005, p.43). Past configurations of

elements are important for what might happen next (Shove et al., 2012). In considering this, The Hub pieced together elements already in circulation in existing performances of cycling, yet in alternative ways. By providing access to multiple elements, The Hub enhanced the chances of succeeding in recruiting people who whilst may not cycle, may identify with and associate to a number of existing elements circulating within The Hub. As Shove et al., conceptualize, in mapping a practice it is useful to depict three separate layers, each associated to elements of meanings, materials, and competences (2012, p.45). The enacting of 'cycling' is only possible when all three layers overlap and elements become linked through the performance of someone cycling. A situation where one or more element is missing or contested leads to the prevention of a performance. For instance, it would be difficult to cycle without some form of material element that we recognise as a 'cycle'. Meanings associated to safety or more specifically the lack of infrastructure to safely cycle on can also prevent someone from cycling in that particular space. Whilst, the inability to successfully balance and competently pedal may prevent opportunities to cycle where only 'bicycles' (which require such competence of balance and a required level of muscle strength) are available. Through the provision of the bicycle, access to the NCN, and training sessions on how to cycle, The Hub provides access to elements in which performances of cycling can be constructed. This is not to argue that these are the basic elements necessary to cycle or that The Hub provides all specific elements necessary to cycle, but rather, The Hub provides a number of key elements across all three boundaries (material, meanings and competences) which enables the opportunity to 'link' these together in a performance. As I contend here then, The Hub actively tried to make such connections between elements, enabling a higher likelihood of cycling performances being enacted, specifically in relation to leisure-based performances.

Whilst I have attempted to highlight a number of key elements circulating in and throughout The Hub, there are overlaps and interactions of elements, thus making it complex to separate them individually. I argue here that this association and consequential impact elements have upon other elements is critical in understanding The Hubs process of recruiting new carriers of cycling. The importance of such circulation of various elements is in regards to maximizing the possibility of use in enabling performance. With The Hub focused on the recruitment of individuals to cycling practice, it is even more critical that multiple elements are circulated. 'First encounters are important' if practices are to recruit and retain faithful cohorts of committed carriers (Shove et al., 2012). In having multiple elements available, all

three layers of elements are overlapped in a proto-practice formation. It is for the subsequent carriers to commit to such a practice, thus the particularization of these elements are important to consider in how The Hub has combined existing elements of cycling through a process of innovation.

Re-appropriating the Cycle Café

As discussed in Chapter 8.2, historically cycle cafes are associated with forms of cycle touring and road cycling clubs, referring to the hard-core cyclist and thus predominantly a space used by existing cyclists. These were usually situated in locations that stimulated and supported particularised variants of cycling with cafes predominantly in rural areas. As a user of The Hub commented, the images, photographs, naming of the food and the television airing cycling races maintained and supported performances of cycle touring and road cycling, recirculating particularized elements to be figured into cycling practices. A Cycle Hub stakeholder also associated similar cycle spaces, such as bicycle shops, facilitating and supporting existing cyclists. Staff and customers were regularly perceived to have a working knowledge of bicycles and distinct associations of meanings and ways of cycling and thus associated negatively to individuals not yet cycling due to their perceived incompetence of cycling (see Aldred, 2012c).

As such, this created something of a problem for stakeholders of The Hub, whose priority it was to develop a space that was welcoming and a positive environment for potential new users of cycling. Importantly then, The Hub did not attempt to associate the space with any current or existing performances of cycling in the attempt to provide a neutral space. As a result, the emphasis upon the value of a café space in itself provided a welcoming and recognizable space to users who did not necessarily cycle yet. In order to de-stigmatise a practice such as cycling, the stakeholders of The Hub deliberately utilised existing cooperative relationships between eating and drinking and cycling, in a new way in which to market cycling to new users. Resultantly, The Hub was structured primarily around the café, an infrastructure that many individuals are largely aware of and comfortable with in their wider day-to-day lives. Stakeholders of The Hub acknowledged the cooperative nature between drinking and eating with cycling, utilizing associations derived from cycle touring and road cycle clubs and situating it within an alternative space in the city. As a result,

elements from existing performances of cycling have been transferred and re-appropriated. As Shove et al. (2012, p.64) comment:

> "Taking the long view, we might therefore conclude that the range of practices in existence today results from an unbroken lineage of past patterns of persistence, transformation and disappearance."

As a result, The Cycle Hub has exploited pre-existing connections and forged and produced new associations not too dissimilar, yet distinct. This is not a new practice in itself but an innovation in cycling with meanings in the Hub through the images and artefacts in the café space and social rides contributing to a different variant of cycling practice that cycle cafes were largely associated to. In their attempt not to associate to any one cycling practice, The Hub does not become labelled and associated with any one particular type of cycling and the potential negative connotations associated to them. As a result, the script and associations to cycling remain open in order to provide an engagement space for cycling. Furthermore, it does not pre-figure or pre-determine the pathway of the user into a specified cycling practice, such as becoming a road cyclist or cycle tourer.

Expanding Leisure Cycling Practices into the City

The notion that one needs training in cycling and that there are particular skills to be mastered is widely supported by The Hub through the provision of social rides and training. As Shove and Pantzar argue, "potential practitioners have to master a new technique; materials and skills have to gel" (2005, p.58). People who take part in social rides at The Hub, are taught on varying levels. The Hub provides initial training on how to cycle involving balancing on a bike and sufficiently pedalling, before going on to learn how to turn and safely stop, all within the confines of the adjacent car park at The Cycle Hub. The beginner rides then expanded upon this, building confidence on developmental rides. These utilised skills taught in the original sessions while also including challenges such as riding up inclines; maintaining speed and control when riding through bicycle chicanes on the NCN; and further distribution of knowledge in going through the M-Check and how best to use the bicycles gears and brakes. These social rides are significant in getting across practical knowledge – that is, knowledge of doing or the 'know-how'. This embodied experience is born first and does not live in the realm of discursive consciousness ('know-what') (Shove et al., 2012,

p.69). This is important in the stage of recruitment as the social rides provide the opportunity to learn such experiences, which would otherwise be very difficult to do. But more than this, such training has to be done in a way that "generates a positive experience and one that people are keen to reproduce" (Shove and Pantzar, 2005, p.58). Thus, the social rides act as a facilitator of learning key skills and knowledge in a way that attempts to instill positive meanings associated to fun, enjoyment, health and well-being.

Yet, while these forms of competences and knowledge are present within many variations of cycling, the social rides produced a somewhat distinct cycling performance of social bunching. The nature of the NCN allowed the ease of cycling side by side with opportunities of having conversations and chats whilst cycling. With one of the ride leaders being a reactionary 'floater', participants rarely had to worry about any logistical issues. As a result, the atmosphere was largely stress-free with the rides being largely sociable and relaxing. Further learning and competence based training sessions are possible, but not through The Hub. For instance, 'Cycle City Tours' are available through and situated at The Journey and introduce participants to further skills, knowledge and cycle infrastructure deemed necessary to navigate cycling in the city centre. Further ethnographic observation at this session revealed that much training involved learning both primary and second position when riding with car and bus traffic. Cycling in the group was predominantly single file due to cycling on the road. Participants were taught to regularly look over their shoulder to establish the movement and flow of the traffic you were a part of, whilst the ride was punctuated with challenges of learning how to safely indicate and cross a junction. As a result, this session referred largely to a vehicular cyclist performance but for moments when the ride utilised new cycling infrastructure built as part of CCAF1 and CCAF2. Here cycling performances were very similar to the social bunching that occurred on the social rides.

As stakeholders of The Hub identified, users may go onto cycle for other purposes that include alternative meanings. But such performances would require further training and knowledge in how to sufficiently cycle. This is raised here in relation to the Cycle City Tours, which emphasised enabling participants to sufficiently negotiate the city centre when riding to and from work. This was subsequently held at The Journey and not The Cycle Hub due to The Journey facilitating commuter based cycling practices. As Shove and Pantzar (2005, p.59) highlight in regards to the circulation of Nordic Walking, "when scale increases, we no longer retain control". This is true for cycling here in that beyond the space and cultural

architecture of The Hub and its use of the NCN, there is a level of relinquishing control in regards to cycling practices. New competences maybe infused with alternative or competing meanings such as cycling for utility and commuting means. The Hub no longer has control in these cases and performances away from The Hub may as a result transform into other variations of cycling. As such, performances of cycling at The Hub are positioned as a distinctive form of cycling with techniques of its own (Shove and Pantzar, 2005).

Conclusion

The combinatorial result of these innovations contributes to a process of recruitment. The Hub provided a context in which existing ingredients of meanings, materials and competence were brought together and combined in a new way in order to facilitate recruitment into cycling. As highlighted, the circulation of these elements does not guarantee the formation of a fully functioning practice. Rather, it highlights a proto-practice, a practice that is yet to be realised by those who engage with the ingredients on offer at The Hub. The Hubs ambition of providing the moral and material infrastructure in one distinct place aims for the integration and forging of links between existing materials, images and skills, contributing to and generating an integrated entity of cycling (Shove et al., 2012; Shove and Pantzar, 2005).

As Shove et al., (2012) highlight, defection and continued participation are often in tension, with critical thresholds established as moments where people may see themselves *as* a doctor a drug-taker, or in respect of this research, a cyclist. This provides a moment of no return, in which from that point on their career being set. However, in respect to The Hub, it is identified that this becoming or progression beyond a critical threshold is not necessarily identified, nor explicit to the stakeholders of The Hub. Indeed, they do acknowledge that individuals can 'progress' onto particular practices of cycling beyond The Hub. Yet, stakeholders of The Hub do not explicitly require performances having to progress past a particular threshold in becoming a particular 'cyclist'. In contrast to Shove et al., (2012), The Hub is not about inducting individuals into a community of practice of cycling, enmeshing them into existing performances whereby they start off as 'outsiders' and novices and go on to develop careers in cycling whereby participants see themselves and are seen by others in a different way, becoming fully-fledged members in which performances of the practice are the normal thing to do and not perceived as a deviant thing to do (Shove et al, 2012, p.70). Instead The Hub somewhat critiques this in the attempt to open up cycling, making it more

accessible and less about becoming a 'cyclist'. As a result, The Hub does not necessarily identify a pathway of progression in becoming a cyclist. This can be contrasted to Tynebikes in that, there was an implicit assumption of progression to a point of being a self-sufficient cyclist in modifying your bicycle to suit the topography of Newcastle and maintaining its working order through maintenance and repairing the bike.

As such The Hub helps to create conditions in which potential new cyclists might make the links required to (re)create performances of cycling at The Hub. The Cycle Hub thus emphasizes, enacts and adheres to an understanding that "practices- new or not – require continual reproduction" (Shove and Pantzar, 2005, p.61). For cycling to exist, people need to perform the practice of cycling and importantly what cycling 'is' and what it becomes, is inherently dependent on who does it and when, where and how it is done (Shove and Pantzar, 2005). In this sense, practices are inherently dynamic with spaces such as The Hub providing a diffusion of elements and ingredients of which a practice of cycling are made of. The Hub is therefore a space of innovation in which performances of cycling take shape and are negotiated, entailing the consumption and recruiting of cycling.

9.2.2 Cross-Fertilising Practices

There is a general assumption by both the stakeholders of The Cycle Hub and Tynebikes to what I define as 'cross-fertilise' variants of cycling. By cross-fertilising I refer to Alkemeyer and Buschmann's comment that people have "the capability to establish connections and disconnections in and among practices" (2017, p.18). Shove et al. concur with this in that elements can be involved in and shared amongst multiple practices (2012, pp.35-36), whilst Watson provides a similar reflection of elements *moving* between practices yet stipulate that it is necessary for them to make sense in relation to the practice in order to be accepted and integrated by the carrier (Watson, 2012). For both The Hub and Tynebikes, the perception was that leisure and recreational based performances acted as a 'connective tissue' in enabling individuals to enroll with other variants of cycling. It was perceived that cycle practices in the form of cycle-leisure had a benefit of introducing individuals to cycling in which they would naturally progress on to cycle-utility and cycle-commuting[14]. Whilst this is

---

[14] This reference to mode-activity, i.e. cycle-leisure, cycle-utility and cycle-commute in this way highlights Cass and Faulconbridge's definition of integrative practices (2016, p.6).

possible, it is argued here that stakeholders failed to acknowledge the complexity of cycling practices and the difference of elements between cycle-leisure and cycle-utility and cycle-commute. The connection of elements between cycle-leisure and cycle-utility and cycle-commute was not successful as a result of the unsafe nature of cycling in the city. It is argued though, that this maybe possible in the future, with it being highlighted here that the subsequent connection being the materiality of cycle infrastructure.

Meanings between Cycling Variants

Tynebikes emphasized the promotion of cycling as 'fun' or 'wonderful', popularizing meanings that were associated to cycle-leisure in the aim that these would be infused with and enrolled into other performances of cycling such as cycle-utility and cycle-commute. Tynebikes assumed that cycle-leisure out in the countryside would lead to an increase in cycling in all contexts with them emphasizing the 'fun' nature of health and well being of the country lanes. The stakeholders of the 'Lets Ride' programme perceived that the social rides would enable individuals to go from not cycling or cycling very little to cycling regularly as part of wider everyday life. Whilst the stakeholders of The Hub also supported the opinion that leisure based or social challenges would enroll and enable cycle usage on a more general day-to-day level.

It was generally assumed by these two social sites that cycle-leisure involved many elements of commonality with cycle-utility and cycle-commuting and through the engagement of cycling for leisure, people could develop performances that would enable performances of cycling for utility and commuting due to the close and intertwining of these practices (Hui, 2017). This assumes that shared elements bridge variants of cycling and therefore provide a point of connection. As Shove et al. argue, "links are made and broken… between the multiple practices of which similar elements are a part" (2012, p.36). Whilst cycle-leisure maybe considered 'fun' and enjoyable, the meaning element lacked connection to forms of cycle-utility and cycle-commuting. Rather than these meanings acting as a connecting tissue that highlight shared elements between practices (or variants of practices in this case), it actually defines their very distinction, as a result of other existing elements, such as the safety aspect.

Tynebikes commented themselves that in order for someone to enjoy cycling and for it to have attachments of health and well being, members had to get away from 'built-up areas' and escape competing with motor-traffic (see Figure 6-2). This referred to the unsafe and un-enjoyable nature of cycling in the city. Whilst Tynebikes considered it possible to cross-fertilise practices of cycling, promoting it as a 'fun' and 'wonderful' through the associations to their cycling touring and recreational rides out in the countryside, this severely contradicted their critique of cycling in the city as not being 'safe'. They highlighted the juxtaposition between these variants of cycling as a result of the unsafe nature of cycling. As previously discussed in Chapter 9.1 interventions in the infrastructural materiality of cycling by Tynebikes failed to significantly alter existing practices of cycling. This had a noteworthy consequence on the dynamic process of association for performances of cycling in Newcastle as the opportunities for new meanings or in this case, cross-fertilizing meanings did not stick (Shove et al., 2012). The unsuccessful attempt to alter material elements meant that performances of cycling were constrained to existing patterns and distribution of meanings.

The stakeholders of The Cycle Hub also perceived a natural progression from leisure cycling, whereby individuals would integrate elements learnt through these performances into more utility based performances of cycling, yet the research shows that there is a clear distinction between cycle-leisure and cycle-utility and cycle-commuting. A user of The Hub highlighted they cycled on the road for leisure using similar routes if they were to commute but at times when it is quieter, adding that they did not commute by bike due to the perceived danger for them. This acknowledges the competition between forms of mobility, which share particular infrastructure of the road network. Whilst Shove (2017) argues that this infrastructural materiality enables various practices, it is argued here that this is not necessarily true. Whilst the road network facilitates road-cycling leisure practices outside of rush-hour commuting times, during these times it is perceived as being too dangerous. It was thus evident that participants of the social rides would transport bikes to The Hub in their vehicle rather than cycling down, something confirmed by a Cycle Hub stakeholder, "we get lots of people who drive here, with their cars, with their bikes… and then go for a cycle ride" (The Cycle Hub, S1). This reaffirms cycling as a leisure practice, with driving as suitable form of utility travel to access such leisure spaces. But this also potentially excludes from the rides individuals who have no access to a car at the time of the rides and who might be fearsome of using the road network. Renewed interest in geography concerning time-space and its constraints is yet to pick up on these subtleties present within existing mobility systems (Kwan 2013).

Therefore what is evident here is the lack of crossover between cycle-leisure and cycle-utility and cycle-commuting. Whilst leisure practices are facilitated and reproduced by The Hub, there is a lack of commonality between elements, which enable this crossover from one cycling, variant to another. This recognizes alternate ways of doing cycling whereby those elements that formulate it are diverse, creating different ways of 'doing' cycling. It is therefore argued here that whilst The Cycle Hub facilitates leisure cycling practices, it lacks the transformation of elements or provision of elements which are necessary for performances of leisure cycling to transition to ones which are more consistent in everyday life in completing and facilitating other practices.

De la Bruheze's (2000) speculation of a symbolic (and material) threshold that has been crossed whereby cycling in British cities had fallen off the radar as a normal means of transport, with connotations of leisure being strongly overlain provides some insight here. In this case the symbolic threshold refers to meanings of safety. Whilst cycle-leisure may attribute meanings of health and well being, these elements are null and void within the city on the main road due to the unsafe nature of the cycling performance. For performances of cycle-utility to take hold on any scale in the city, cycling had to be disassociated from meanings of it being an unsafe practice and as in the eyes of Tynebikes and latterly The Cycle Hub, connected to meanings of enjoyment, fun and health and well-being. In considering this dynamic process of association, meanings were to be both extended and eroded. For Tynebikes, the extension of these set of meanings already associated in leisure based performance meant other previously dominant themes, particularly that of safety, would be overlain, transformed or displaced. Although Tynebikes attempted to disseminate ideas, pictures and texts associating utility cycling as fun and healthy, there is no guarantee that these will stick (Shove et al., 2012). The appropriation of meanings is an inherently local, inherently uncertain process (Shove et al., 2012, p.56).

Rather than promoting and attempting to encourage elements from one variant of cycling as something that is relatable to another variant as Tynebikes did, what is required is to understand how the meaning of fun and enjoyment of cycle-leisure is potentially produced by other elements within the context of its practice. As Blue and Spurling (2017) highlight, material-spatial arrangements and complexes of practices come to reflect one another. What this means is to consider the material-spatial change in complexes of practices. Whilst 'things' constitute elements of individual practices, it is important to also consider how such

'material-arrangements' act as a connective tissue that holds practice complexes together (Blue and Spurling, 2017, p.33). Drawing upon Newcycling's main political argument, the separation of cycling from motor-traffic in the city and the sufficient connection of this in a fully operational network may provide such similarity and overlap with leisure based performances of cycling on traffic-free paths. Indeed, this was highlighted in regards to the Cycle City Tours (Chapter 9.2.1), with performances along sections of the SCR in Newcastle City Centre being very similar to 'social bunching' performances along the NCN. But what Newcycling also highlights is that the network must connect practices distributed in time and space. Such material-spatial arrangements must connect to practices of shopping, commuting and getting to school, amongst other practices, something that was envisioned when developing the NCN, but consequently did not materialise as a result of 'stringent highway standards' preventing the construction of new cycling infrastructure on the road network (see Chapter 8.4). A potential transformation and alteration in the material-spatial arrangement of existing material infrastructure that the community of The Hub use may enable the subsequent connection between different variations of cycling. As a result, such material-arrangements contribute to this evolution of cycling practices whereby elements of differing variations of cycling are shared and contribute to the crossover of practices and growth of cycling.

Conclusion

In regards to cross-fertilising practice, The Hubs future contribution or enabling to other performances of cycling can be considered to be a 'reservoir' of people who cycle, which may potentially diversify to encapsulate other variants of cycling. But in order for variants of cycling to benefit from one another there must be common ground and a point of connection. Variants of a practice may have the ability to cross-fertilise through the formation of a connective tissue around rectifying the safety element of cycle-utility and cycle-commuting. In order to do so it is assumed that alterations to materials, meanings or competences must evolve to create elements between practices that then enable this crossover. As highlighted such associations and appropriations of meanings and reclassification were constrained by existing patterns and distributions of meanings associated to utility and commuting cycling and as a result did not stick due to the contradiction of unsafe and fun meanings being used. Thus, this juxtaposition of meanings needs to be altered in order to create overlaps and intersections between resulting practices. As it has been shown however, the promotion and

attempts of instilling such meanings by Tynebikes has not resulted in such alteration due to lack of up take by would be cyclists.

9.3   The Influence of Stakeholders

The creation of Newcycling marked the introduction of new individuals into campaigning for better cycling infrastructure on Tyneside. Whilst Tynebikes had disbanded and dissolved by this time, a large number of individuals associated with organisations such as Cycling UK (formerly CTC) were engaged with cycling politics in Newcastle and continued campaigning, often brought into policy circles to give 'the cyclists view'. Such participation matters not only in regards to "who gets the opportunity to do what, but for who it is that shapes the future of a practice" (Shove et al., 2012, p.73). Expanding this to consider the transformative nature of campaigning and advocacy, we can consider their impact upon transforming and reproducing cycling practices.

9.3.1   Old Timers and New Radicals

As Tynebikes strongly associated themselves to preserving cyclist's rights and campaigning for safe cycle spaces for cyclists, there was a strong association with the maintenance of commitment to those already engaged with cycling performances. Due to the lack of distinctly new material and lack of interaction and re-crafting between such elements when introduced, the trajectory of future cycling performances were limited to those already cycling or those close to the periphery of cycling. Tynebikes' trajectory of a cycling practice therefore enabled the assistance of current performances rather than recruiting new cyclists. Whilst this may not have been their intention, it does reveal a 'threshold' that is to be surpassed in order to recruit new individuals into cycling. Tynebikes attempts to recruit new cyclists through their various interventions and vision of cycling is considered to be below the threshold of recruiting new individuals on any sort of scale.

The emergence of Newcycling highlighted the emergence of new individuals who identified new visions. This new generation had "greater scope and motivation for doing things differently and that old-hands, who define the core" were 'typically stuck in their ways' (Shove et al., 2012, p.71). As Watson (2012) comments, people who perform a practice can also provide a mechanism of change. Their own performances of cycling experienced in other cities such as London and countries of Germany and France were different to existing

303

performances performed in Newcastle. Rather than considering their own performances of cycling as human agency distinct to the individual themselves, practice theory argues that this human agency is "contained within a universe of possibilities defined historically specific complexes of practice" (Shove et al., 2012, p.126). It is in this sense then the agency of the newcomers was made possible by practices experienced outside of Newcastle, most notably in cities and countries where cycling was more normalised as a method of transportation. This difference provided the scope and motivation in campaigning for a different practice of cycling, with such carriers not proving to be faithful and reliable servants to existing cycling practices present in Newcastle and instead pushed for the integration of elements that were present in their own performances of cycling. As Shove *et al.* (2012, p.72) draw to attention; the way in which the relation between 'newcomers' and 'old-hands' is structured is critical for the circulation (or not) of expertise and for how careers develop. The importance of new individuals entering the political sphere of cycle activism altered the expectation of elements in regards to the practice of cycling, with previous materials advocated by Tynebikes being judged inadequate by Newcycling.

However, this analysis does suggest a smooth transition. Stakeholders of The Newcastle Cycling Campaign referred to times where matters of opinion differed between themselves and pre-existing cycling stakeholders, who continued to advocate standards and goals associated with vehicular cycling. With those recently new to campaigning identifying cycle activism differently to those who had been involved considerably longer, some members of Newcycling referred to times of 'brokering' in which new ideas were introduced by themselves, whilst also being aware of and sensitive to the existing members of the cycling community (Wenger, 1999). Members of Newcycling reached out to former members of Tynebikes who were at the time still engaged with cycle lobbying in order to understand pre-existing views on cycling interventions required to increase cycling levels.

The difference in visions of cycling practices were evident when a former member of Tynebikes commented about the construction and development of new separated cycling infrastructure along their usual journey route as creating a problem of being 'hemmed' in and preventing them from overtaking another person cycling due to the lack of width (Tynebikes, S1). This was compared to their existing cycling performance of cycling on the road in which the ability to use all the road carriageway in order to overtake the other person was more favourable to them than the provision of dedicated cycling infrastructure. Whilst this example

provides protection to the users and therefore a key intervention advocated by Newcycling to capture new carriers, it also created a 'crisis of routine' for the existing cyclist (Reckwitz, 2002). Whilst such infrastructure may bring practices into line with expectations of others, in the form of safe cycling infrastructure, for some individuals, these new performances can be disturbing, even threatening, requiring them to abandon habits of a lifetime (Shove et al., 2012). As a result of this, the person who was accustomed to a particular cycling performance on the road was experiencing a re-crafting or re-calibration of what was perceived 'normal' to them when cycling. This does not imply a willing transition and alteration of their performance however, as it was evident that they rejected the new materiality. The ability to cycle on the road was still possible and as a result, their performance did not alter because of the perceived convenience of cycling on the carriageway (i.e. being able to take over when necessary), with the new separated cycle infrastructure not having an impact as they already felt safe in their performance of cycling on the road.

9.4   Maintaining Practices of Cycling

This part of the chapter places particular attention on the role a community of practice has in retaining and maintaining cycling performances. Often ignored in policy as a result of the focus upon growing cycle usages, this section highlights Tynebikes, most notably through their newsletters, contributing to a particular perception and performance of cycling. It is argued that cycling wasn't generally assumed enough, with other rules, norms, knowledge and competences circulated in reaffirming an identity of being and becoming a 'cyclist'. Whilst this maintained performances for those a part of Tynebikes, it is also highlights that members were potentially the 'least experimental in orientation' (Shove, 2012, p.373) and therefore limited the expansion of cycling performances beyond such population.

9.4.1   Path Dependency and Conservatism among Communities of Practice

Tynebikes successfully retained citizens within the practice of cycling through creating a community of practice. Newsletters provided a mechanism in which members mutually engaged with one another producing, contributing and therefore circulating knowledge of cycling. The newsletter enabled members to share repertoire of cycling which was deemed legal and safe of what they do and know, contributing to particularised understandings of 'know-what'. Important knowledge aspects of cycling included the mechanics of altering the

bicycle in order to maximise its performance as well as keeping it in good working order. This drew upon other practices closely associated to cycling such as fixing and maintaining the bicycle as a necessary and cooperative relationship. As Macrorie, Royston and Daly (2014) refer to, the shared domain of interest, competence and knowledge as distinguished through the Tynebikes newsletters contributed to a particular perception of cycling. This raises and conveys the relations between practitioners, performances and practices in which the on-going structuring of acceptable cycling performances circulated by Tynebikes shaped and perpetuated a particularised practice to be carried out by those cycling (Macrorie, Royston and Daly, 2014). This particular cycling practice was envisioned by what they campaigned for in regards to particular material configurations (or lack of) and was further enhanced and coupled with the various norms, images, skill set and rules circulated in the newsletters.

These various characteristics commonly outlined by Tynebikes contributed to a distinguishable line between being a member and a non-member. More specifically it can be considered that this represented a process of becoming a 'cyclist' in which the performance of cycling wasn't generally assumed to be enough. These other rules, norms, knowledge and competences which circulated around the performance of cycling itself and other cooperative practices such as fixing ones bike reaffirmed this identity of being a 'cyclist' and becoming what they do (Shove et al., 2012). Instructions were provided on how to cycle in a certain way, presented in the form of 'know-what' with the understanding and 'know-how' assumed to have been previously acquired in order to successfully implement advice given. In understanding Royston, Daly and Foulds (2014) concept of know-what and know-how, Tynebikes assumes a preconceived level of understanding and experience in order to carry out such advice. This refers to Tynebikes providing advice to its members at a particular point in their cycling career. The collection of various news articles contributed to a consensus of what to do, how, what actions and artefacts are suitable or when they need refinement (Wenger, 1999, p.81).

Referring to Lave and Wenger (1991), Tynebikes constituted and defined a very particular practice of cycling throughout the 1980s and 1990s that wasn't a result of any one individual but the culmination of many members and their subsequent articles. Whilst this would have given meaning to those already involved, these meanings heavily influenced and structured the practice of cycling throughout this time, creating a path-dependency. It therefore not only

held people hostage to a particularised experience of cycling, but also dictated how and whether new cyclists would be recruited into such a community. The newsletters enabled members of Tynebikes to impart their knowledge, maintaining power based upon this knowledge. Conceived in this way, learning leads to an imitation and repetition of existing interests, interpretations and knowledge (Alkemeyer and Buschmann, 2017). Whilst novices can attempt to do things differently, gain independence and claim originality, the newsletter showcases how within the community-of-practice at Tynebikes, learning, techniques, knowledge and know-how are passed on and socially dispersed amongst its members. As Shove points out, such 'lead user cohorts' might be those who are the 'least experimental in orientation' (Shove, 2012, p.373). Therefore, this questions whether such strategies generate new cyclists and grow cycling performances or whether such trajectories of cycling practices require radical disruption from 'outside' or 'fringe' elements to an existing practice. The lack of cycle growth throughout this time can be seen as a consequence of this level of commitment to such a practice.

9.5   Summary

This chapter has reviewed the empirical research presented throughout the previous three chapters in order to formulate an understanding of how cycling social sites affect trajectories of cycling. In the process this chapter deployed a theoretical framework derived from practice theory to compare and contrast social sites, establishing similarities and distinctions between them in contributing to various trajectories of practice.

In the first section of the chapter, I argued that whilst both Tynebikes and Newcycling attempted to build new forms of cycling through material interventions, their understanding of the level of material intervention necessary to create safer performances of cycling contrasted to one another. I conceptualised that material interventions require surpassing a threshold in order to break and shift cycling practices. Tynebikes' incremental approach to interventions failed to re-craft key elements of existing performances, and instead contributed to the reproduction of existing cycling performances in a consistent cycling-as-entity configuration. In contrast, Newcycling promoted material interventions that by Tynebikes standards were politically unfeasible. As a result, both campaigns perceived a different material threshold necessary in order to recruit new cyclists.

The second section of the chapter explored processes of recruitment, something that was distinctly related to The Cycle Hub, as well as to some extent Tynebikes. Unlike building practices through the introduction of new elements, recruitment of new cyclists referred to the circulation and combination of existing elements in new and alternative ways. The Cycle Hub innovated cycling practices through the novel integration of competence, meanings and materials to create particularized performances of leisure cycling. This finding also highlights a perception shared by both Tynebikes and The Cycle Hub that forms of leisure cycling would naturally lead to and inform levels of utility and commuting cycling. While possible, I argued that this process of cross-fertilisation was highly unlikely due to fundamental differences between the variants of cycling regarding infrastructure and its associated meanings for potential cyclists.

Finally, I noted the impact carriers of cycling have through mobilising their previous experiences of practices from other geographical locations. This experience of practices formed of similar and alternative elements informed a different vision of what cycling could be in Newcastle. As a result, a distinction between old timers and new radicals was mobilised to capture this new approach.

The next and final chapter returns to the research questions and addresses these before making suggestions for further research.

10 Conclusion

The motivation of this study was to establish how sustainable methods of transport such as cycling were being structured, promoted and developed in Britain with regards to existing cycling cultures. This study focused on the case study of Newcastle upon Tyne, a city with a low cycle rate that reflected much of the national picture. The research focused on three social sites (Tynebikes, Newcastle Cycling Campaign and The Cycle Hub) in order to understand the complexity and variety of cultural practices associated with cycling and the subsequent trajectories of practice these sites enabled.

Split into two sections, the first section of this chapter addresses the three research questions outlined in Chapters 1 and 4, with each question answered using the empirical material and theoretical discussion presented in the previous chapters. Firstly, I argue that social sites differentiate their advocacy in various ways that reflect social practice theory's elements of meaning, materials and competences. The combination of these elements also lead to particularised variations of cycling practice. Consciously or unconsciously, social sites emphasise particular elements of cycling practice over others and as a result shape and advocate particularised variations of cycling.

The second research question leads on from this in conceptualising the resulting four trajectories of cycling practice social sites advocate and contribute towards. I argue that new cycling cultures are born through significant alterations to the structure of practice. Social sites build cycling practices through the introduction of new elements. However, in order to successfully build new variants of cycling, these new elements must surpass the threshold of existing cycling practices. Secondly, cycling cultures grow through the combinatorial innovation of existing meanings, competences and materials. Thirdly, cycling practices are maintained through the continued popularisation of existing elements in current use and circulation. And finally, cycling cultures can experience decline through the de-construction of a performance of cycling as a result of building new performances of cycling.

The third research question reviews the value and contribution of practice theory as an analytical framework for cycling research. Most importantly, the use of practice theory goes beyond an overly individualistic perception of cycling, whilst highlighting the value of materials, competences, and meanings associated to cycling and consequently, how change might occur. It is also raised that there are various trajectories of cycling other than attempts

to increase cycle usage. The understanding of community of practices not only highlight that cycling cultures can enable change but it also refers to the potential continuation and maintenance of cycling practices.

The second section of the chapter moves onto future research where I make three suggestions, positioned within a practice theory framework. First, I suggest a focus on a 'system of practice' approach in reviewing current practices of planners and engineers in order to understand potential interventions that would culminate in alterations of cycling performances further on in time. Second, I suggest a broader investigation into how cycling practices integrate with wider everyday life practices. Understanding the everyday negotiation and interaction between practices, of both people who cycle and do not cycle, may identify further barriers that are not specific to the performance of cycling, but are present in wider everyday life. And third, I suggest further investigation into the understanding of cycling 'biographies'. I expand upon the topic of cross-fertilisation explored in this research to identify how variants of cycling may inform one another and whether there are consistent processes of defection from one variant of cycling to another.

10.1 Review of Research Results

In this part of the chapter I review the three research questions. Both the context chapter (Chapter 5) and the empirical chapters (Chapters 6-8) contribute to answering the first research question of assessing how cycling social sites contribute to cycling practices. The theoretical chapter, Chapter 9, is used to reflect on the second research question in formulating an understanding of how social sites intervene in practices of cycling and the subsequent affect this has on trajectories of cycling practice. The third research question takes a reflective look back on the research in order to review the value and contribution the theoretical framework provides for cycling research.

10.1.1 Advocating for Cycling: Elements of Differentiation

This section addresses the first research question: *how do cycling social sites contribute to cycling practices and forms of cycling culture*? In chapters 6, 7, and 8, I introduced and explored the three social sites of Tynebikes, Newcastle Cycling Campaign, and The Cycle Hub. Through this I argued that social sites differentiate in their advocacy approach to cycling, utilising practice theory's elements of meanings, materials and competences.

Particular elements of cycling practice are emphasised over others and as a result contribute to variations of cycling. It is evident that each social site contributes to and highlights a particularised performance of cycling. In conceptualising cycling in relation to practice theory's elements of meanings, material and competences I have contributed to these understandings of performances.

The Cycle Hub contributes to and reaffirms performances of cycle-leisure. The Cycle Hub's assemblage with the NCN meant that traffic-free routes facilitated performances. The use of this network, particularly in regards to its social rides meant that a particular performance of 'social bunching' was evident. The materiality of the NCN enabled a distinct performance of social bunching. Here, it was identified that participants would ride side-by-side, enabling discussions and a social atmosphere to emerge when riding. Unlike Aldred and Jungnickel (2012), performances of social bunching rarely occurred or extended to the road network. Instead of modifying the road environment to cater for groups of cyclists through the adoption of a convoy formation, participants would adopt a single file formation. This highlights the disjuncture of performances taught through the social rides and the wider road network where the system of automobility requires alternative cycling performances. Whilst there were moments of re-appropriation of space on the road-network, ride leaders would remind participants the rules of the road, their liability and to remain alert and aware in their surroundings when cycling. This contrasts and undermines the argument in the blurring of leisure and utility if the image of cycling is improved and status rose (Davies et al., 1997). What this research has argued is that the materiality of the NCN enabled meanings of health, wellbeing and enjoyment along with the reduction of competences necessary to cycle, thus resulting in a distinct performance of social bunching and cycle-leisure. For performances of leisure to potentially inform performances of utility and commuting, a similarity of infrastructure may be conducive to encourage a crossover rather than attempts to improve the image of cycling which somewhat indicates an alteration of cycling meanings.

While both Tynebikes and Newcastle Cycling Campaign would assumedly reflect contributions to everyday cycling performances, this research has shown an evident distinction between the two campaigns. Tynebikes' association of using the road network and campaigning for minor infrastructural alterations highlighted that whilst they were campaigning for cycling improvements, they were somewhat content with the existing environment albeit with a few alterations. They did however emphasise the importance of

cycling competence. Through their newsletter, it was apparent that the element of competence and the understanding and application of vehicular cycling would enable riders to handle the road environment. This draws similarities to Aldred (2012c) in highlighting advocacy for a type of cycling performance that is associated with and reflective of the 'hardened cyclist' in which they were de-sensitised and normalised to the pressures of the road environment.

While Newcycling are a cycling campaign, they provide an alternative perspective to Tynebikes through the elements they campaigned for. Newcycling focused primarily on the importance of materiality for growing cycling. Their campaigning for separated cycling infrastructure refers particularly to understandings and meanings of safety. With an emphasis on materiality through infrastructure development, Newcycling highlight an alternate standpoint to Tynebikes in which competences and knowledge required are lowered as a result of the type of infrastructure advocated. What can be identified here was Newcycling campaigned for a materiality in which competencies may travel from the human, to being delegated by the infrastructural material (Shove et al., 2012).

In developing upon the differing meanings of safety and how these are achieved through the materials and competences of cycling, both Newcycling and Tynebikes also reveal further understandings in regards to this associated to gender, age and meanings of masculinity. The interventions envisioned by Newcycling in the form of separated cycling infrastructure to create a more equitable practice of cycling reveal a current cycling practice that is gendered and age restrictive. As Aldred et al. comment when cycling is low, such as the context of Newcastle, it is also generally demographically skewed with women, children and older people tending to be under represented (Aldred et al., 2016). It is important to consider that the majority of the stakeholders of Newcycling interviewed were women and with this their experience of cycling can be different to those of differing. As Shove et al. state, practices are dynamic in being remade and changed, if only fractionally through the performances of its cohort population, or as in the case of Newcycling through the campaigning for new elements of cycling (Shove et al., 2012). These carriers of cycling are campaigning for a particularised practice, which as shown in the research focuses on enabling safe cycling performances that are not age restrictive (Chapter 7.2.1) but are family inclusive. With Newcycling's focus on the material element of cycling, particularly cycle infrastructure, this research supports previous research findings that reported gender and age imbalances can be altered through the

provision of high-quality infrastructure (Aldred and Dales, 2017; Aldred et al., 2016) by identifying social sites where this is being enacted and campaigned. The use of Social Practice Theory also reaffirms and develops upon Aldred et al.'s implication for policy of a differential 'threshold' effect in that all else being equal, a more supportive cycling environment for women (and older people) is needed to start cycling, on average, than we do for men and younger people (Aldred et al., 2016, p.40).

In comparison to this, Tynebikes' community of practice in which meanings of safety were tied into competences and knowledge rather than being built into the existing road environment reflects cycling performances which can also be viewed as gendered and masculine. This expands upon Skinner and Rosen's comment that men generally display a hands-on, comfortable relationship to technology, setting up their own lighting and load-carrying systems and handling repairs whilst women regularly commented on having repairs sorted by a man be it their husband, son or professional cycle repairer (who are predominantly male) (Skinner and Rosen, 2007, pp.89-90). As de la Bruheze states, with cycling's low use, it has often become associated with youth, leisure and masculinity, no longer associated with or seen as part of everyday life (de la Bruheze, 2000). Tynebikes community of practice (Chapter 6.5) reflects a masculine practice of cycling through the necessary knowledge and competences necessary to successful continue performances of cycling. Whilst the social site of Newcycling highlights how cycling infrastructure can be particularly gendered, Tynebikes refers to further materials and competences of cycling that are associated as masculine performances, thus potentially having restrictive (or skewed) effects when the campaign was attempting to recruit new cyclists.

In associating these social sites as contributing to a particular variant of cycling, I highlight an issue all sites referred to. While both The Cycle Hub and Newcycling reject perceptions of being for existing 'cyclists', Tynebikes members associated themselves with the identity of 'cyclists'. It is apparent that wider society has an influence in this as I argue that the wider acceptance and awareness of cycling now results in less of an inverted and protectionist view of one another as a marginalised group of cyclists. Newcycling distance themselves from the idea of campaigning for existing cyclists, identifying that campaigning for cycling should embrace those who do not currently cycle. Whilst they do not associate with other identities, as outlined in Aldred (2013), they argue that the term 'cyclist' as a labelling reference would assume to campaign for those already cycling. For Newcycling the term cycling decentres the

practice from individuals, enabling them to engage with their wider motive in reimagining who and what cycling can be within the urban environment. The term cyclist is avoided due to the stigma associated with it (Aldred, 2013). Tynebikes however actively associated themselves as representing cyclists' interests throughout Tyne and Wear. In campaigning for 'their needs' and making cycling safer for 'us', they highlighted the marginalisation of cycling from mainstream society. Cycling was a mobility rendered outmoded in policy discourse of the time, thus Tynebikes association and campaigning for cyclist's focused on maintaining and preserving existing performances of cycling. But in doing so, this had a constraining impact and exclusivity to existing cyclists (Batterbury, 2003). In distancing themselves or their users from being labelled as 'cyclists', both The Cycle Hub and Newcycling contribute to this on-going stigmatisation or 'othering' of the practice. Highlighting that they do not look like a cyclist, cater for cyclists, or that some cyclists can be their own worst enemies in campaigning, they acknowledge an identity of cycling they wish to disassociate themselves from.

Chapter 5 introduced the wider cycling culture in Newcastle. What was evident here was the growth of cycling social sites from the 21st century onwards. With the increase of cycling social sites over time, they have been able to focus on specific issues associated with cycling. Newcycling rejected an advocacy-based approach and instead adopted a 'council' facing approach (chapter 7.3.2). This refers to engaging with practices within institutional and governmental spaces that focus on cycling at an entity level. On the other hand The Cycle Hub adopted a 'user' facing approach in engaging with the performances of cycling on the level of the (potential) cycling carrier. Tynebikes adopted a mixed approach, facing local government and citizens in arguing for improved infrastructure whilst trying to increase cycle rates through being a promotional advocacy group.

10.1.2 Interventions and the Resulting Trajectories of Cycling Practice

The second research question sought to answer: *do cycling social sites affect trajectories of cycling?* Through the utilisation of a practice theory framework the research shifts the debate away from individualistic blaming of a lack of cycle growth in support of interdisciplinary design intervention. Here it is argued that the various advocacy and activist approaches the three social sites took and their conceptual understandings of cycling in reference to the

elements of meanings, materials, and competences, contributed to multiple trajectories of cycling culture. I turn to each one in turn below.

How Cycling Cultures may be born

New cycling cultures are born through significant alteration to structures of practice. This relates to the structural focus of practices-as-entity and at a higher-level strategic intervention. As a result cycling is considered as an 'ideal type' without reference to a particular case or performance, thus relating to a formal structure in identifying what performances are correct and acceptable (Spurling and Blue, 2014; Schatzki, 2008). For new practices of cycling to be born the introduction of new elements must have consequential impact upon the wider structure of the practice and as a result 're-craft' other elements already in circulation of the practice. In this thesis, this was highlighted particularly in relation to material elements, particularly cycling infrastructure. Newcastle Cycling Campaign's lobbying for a separated cycle network introduced significantly different materials of cycling infrastructure to existing practices throughout Newcastle. Their awareness of the association of meanings of safety and convenience a separated cycle network would bring along with the envisioned reduction of competence and skill necessary due to the reduced use of the motor network denoted a change to other existing elements of cycling in circulation at the time.

As Spurling and Blue (2014) highlight, obduracy is easily identifiable in the material world and with structures built in relation to 'ideal types' of practices. Newcycling contribute to new understandings and perceptions of what is considered 'normal' in regards to cycling, with historical representations such as vehicular cycling, no longer being relevant. Whilst Shove et al. (2012) comment that elements are not only interdependent but they are also mutually shaping, the process of new practices of cycling being born requires the latter. In regards to interventions in cycling practices therefore, at any level of advocacy, it should be considered that the subsequent intervention cannot be seen in isolation, but there must be a subsequent re-crafting of other connected elements in order to achieve a significant change in cycling practices.

Unlike practices being born, growing cycling referred to the engagement with and direct recruitment of individuals at an individual level with the use of existing elements of a practice. Whilst I referred to The Cycle Hub's combinatorial innovation of cycling practices through the novel integration of meanings, competences and materials, I also argued that attempts of cross-fertilisation were unsuccessful.

The Cycle Hub's approach to recruiting people was reflective of the rise in cycle hubs and cycle cafes. Whilst Spurling and McMeekin (2015) referred to Birmingham City Council's 'Bike North Programme' as re-crafting all elements of cycling practice in Birmingham, I define this more as innovatively combining existing elements of cycling in new ways to enable cycle growth. I reserve the use of re-crafting in relation of elements having an effect upon other elements as a result of their introduction. As Pucher et al. (2010, p.121) admit, when introducing multiple interventions to cycling it is "virtually impossible to disentangle the impacts of each individual measure". Oosterhuis (2014) seconds this in highlighting that particular interventions may be suitable when marketed together. The Cycle Hub provides all three elements, which are particularly aimed at engaging new individuals to cycling. Providing cycling in a proto-practice format highlights the opportunity to integrate, assimilate and combine various elements associated to cycling in an individual's performance. Again, this refers back to practice-as-performance in acknowledging the diversity and variety of performances of cycling (Watson, 2012). By providing access to multiple elements, The Hub enhanced the chances of recruiting people whom whilst may not cycle, may identify with and associate to a number of existing elements circulating within The Hub. Horton's 'cultural architecture' is pertinent in referring to the development of architecture relevant to cycling in pushing the boundaries of bicycle culture and exposing evermore cycling opportunities into being. The Hub acknowledges cycling stigma by playing down associations with the 'cyclist' in normalising the space to individuals new to cycling. Most notably then, infrastructure such as this, engages with and facilitates new carriers of cycling through the innovation of existing cycle-leisure practices.

That said, it is evident that these stakeholders failed to acknowledge the complexity of cycling practices and the different elements of cycle-leisure and cycle-utility. Whilst cycle-leisure maybe considered fun and enjoyable, the meaning element lacked connection to forms

of cycle-utility. Rather than these meanings acting as a connecting tissue that highlight shared elements between practices (or variants of practices in this case), they actually defined the very distinction between the two performances. This is important to consider as a result of the common reliance upon soft measures of cycling as a result of public opposition and political infeasibility of intervening with hard measures (Bamberg et al., 2011; Pucher et al., 2010). With bicycling specific programs and education and training examples of soft interventions and measures utilised by both The Hub and Tynebikes, it is important to consider what elements these popularise. The social site of Newcycling concurs with Pooley et al.'s (2013) statement that it is essential that the urban environment is made safe to cycle in, requiring the provision of separated infrastructure on all busy roads in urban areas. As such this posits that soft interventions in the form of meanings and competences may not currently be enough and that hard material intervention is a prerequisite before such engagement by social sites can popularise and circulate these elements.

Maintaining Cycling Cultures

For a practice to persist, people are required to utilise and configure elements into a performance. As a result, carriers themselves maintain the life of the practice through their continued use and popularisation of elements in a form of a performance. Whilst this may not be perceived as important as understanding opportunities of growing cycling, it does contribute to the understanding the potential continuation of cycling cultures that may prevent the recruitment of a new cycling population. With Tynebikes, their advocacy and campaigning contributed to the maintenance of cycling performances. Here, I draw attention to the material infrastructure Tynebikes campaigned for; the evidence of a community of practice; and the reflection of members being 'old-hands'. However I also highlight how cycling social sites may in fact prevent cycle growth as a result of their particularised visions of cycling that may not align with the views of wider society of what are acceptable performances of cycling for them.

When comparing both Tynebikes' and Newcycling's campaign approach for cycle infrastructure a conceptual threshold between creating new practices and maintaining practices were identified. As argued in chapter 9.1.1 Tynebikes advocacy and promotion of shared use of pathways, lanes demarcated with paint on roads, advance stop lines, dropped curbs and use of bus lanes failed to capture and enrol new individuals to cycling. Their

approach of small incremental alterations highlighted a continuation of the system of automobility maintaining a dominant relationship over the system of velomobility. Chapter 9.4 highlighted Tynebikes as a community of practice, which contributed to the on-going use and circulation of elements to utilise when cycling. Their newsletter, Tynebikes News and latterly Tyne Biking, reflected a shared domain of interest, in which members would contribute their own experiences, knowledge, and know-what to the wider group through various articles. Through both their advocacy and campaigning approach then, Tynebikes contributed to and sought to uphold a particular performance of cycling. Tynebikes approach reflects much cycle advocacy of the time. 'Lead users' are confirmed as being least experimental in orientation, and rather stuck in their ways (Shove, 2012). It is thus critical to understand whom cycling is conceived for and by, concurring with Pooley et al.'s (2013, p.177) assertion that those who are already existing committed cyclists and have negotiated a hostile urban environment may not be the best in enabling cycling growth. Furthermore, this research extends this idea in proposing that they may in fact prevent cycling performances being recalibrated into a new pattern of meanings, competences, and materials that reflect a wider expectation and reflection of what safe cycling performances should look like by the broader population (including those who do not yet cycle) (Shove et al., 2012).

On the other hand, it is also critical to consider the political discourse at the time of Tynebikes engagement and whether their advocacy and activism contributed positively to cycling culture in preventing a further decline and even potential fossilisation of cycling. As Chapter 6.3.1 explored, cycling as a practice was largely conceived as an outmoded practice of transport and as a result Tynebikes largely campaigned to legitimise cycling. Policies referred to a 'tolerate but do not encourage' approach reflective of a national picture at this time. Cycling was at a critical juncture of potentially becoming extinct:

> "[Name] used to say 'if we can just keep cycling alive for 10-15 years without it being totally marginalised, then maybe it'll gain traction again' which I think it has done."
> (Sustrans, S1)

The engagement of the social site helped maintain cycling at a time where it was particularly vulnerable from becoming a fossilised practice of mobility thus enabling people to maintain their cycling performances. If such interventions were advocated today these would be considered as conservative and counter-productive to growing cycling.

In regards to the decline of cycling cultures, I referred particularly to the de-construction of a performance of cycling as a result of building new performances of cycling. With the advocacy and campaigning for particular elements of cycling, Newcastle Cycle Campaign undermined the value and necessity of other elements. Rather than the scripting of the human actor with skills and knowledge in producing performances of vehicular cycling, campaigning for separate cycle infrastructure meant particular competences were unnecessary as a result of the materiality of infrastructure. Social sites not only have the ability and opportunity to introduce elements or popularise particular performances of cycling but they also have the opportunity to de-construct and undermine them as well. The changing importance of elements in performing cycling resulted in performances associated to particular elements falling out of favour in the future. As Integrationists have argued, the separation of cycling would reinforce its marginalisation within the transport environment (Aldred, 2012b). This refers back to CTC's historical assumption of losing legitimacy on British roads had they accepted the enforcement of using cycle paths, which as already identified, were considered inadequate, sub-standard and an attack on the cyclists right to cycle on roads. Yet the rise of a separationist discourse of international best practice called for enforceable national standards, which have been advocated by a new generation of bloggers and groups like Newcycling. This research therefore contributes further to this debate in highlighting the elements associated with both vehicular cycling and separated cycling infrastructure. This research also points towards a potential changing of the guard in wider cycling politics associated with campaigning for separation over integration. Yet, this binary of cycle activism will likely continue for some time as a result of the loyalty of 'old-hands' continuing to practice vehicular performances even when separated infrastructure is present. Whilst vehicular cycling may become fossilised through a wider process of collective forgetting, conservative individuals who reject the newer practice may remain loyal to performances of vehicular cycling.

10.1.3 *Practice Theory's Contribution to Cycling Research*

The third research questions: *what is the value and contribution of practice theory as an analytical framework in cycling research?* I suggest practice theory provides two critical contributions to cycling research. First and most importantly, the use of practice theory goes

beyond an overly individualistic perception of cycling, whilst highlighting the value of materials, competences, and meanings associated to cycling and consequently, how change might occur. Secondly, there are various trajectories of cycling other than attempts to increase cycle usage. The understanding of community of practices not only highlight that cycling cultures can enable change but it also refers to the potential continuation and maintenance of cycling practices.

The use of practice theory enabled the focus on the performances and understandings of cycling over that of the attitudes and beliefs of individuals. Utilising practices as a unit of analysis, the framework provided an innovative way of conceptualising behaviour. Rather than considering behaviour such as a matter of choice, based on the views, beliefs and actions of the individual (Shove, 2010a), this research has shown how behaviour is tied up in "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" (Reckwitz, 2002, p.249). More simply however was the value of the three elements of meanings, competences, and materials in providing a valuable framework in which to analyse cycling behaviour. Through the review of the three social sites, it was evident that understandings of cycling and performances differed not only in relation to the various elements required to cycle but also the emphasis placed on certain elements. As it was argued, Newcastle Cycling Campaign stressed the necessity of material importance and intervention for cycling to grow. Here the elemental framework highlighted an emphasis on the materials in order to alleviate pressure exhibited on the competence element needed to cycle. The social site of Tynebikes on the other hand perceived a lower threshold of materiality was necessary, which was to be made up by the competences and skills of vehicular cycling. As a result, the consequential meanings of these two practices of cycling campaigned for were somewhat different. In doing so this research has de-centred the individual and instead emphasised the shared and social convention of practices.

Secondly, this research has highlighted that growing cycle usage beyond the current low levels it experiences is multifaceted and complex. As the previous section (Chapter 10.1.2) concluded, social sites contribute to multiple trajectories of cycling. And whilst Shove et al. (2012) acknowledged a prior assumption that theories of practice had yet to tap into the potential of understanding change and thus capturing the dynamisms of social practices, this research has contributed to practice theory in highlighting four trajectories of cycling. As

such, it also refers to a multifaceted approach to growing cycling cultures. Interventions are not just about cause-and-effect as interventions at one location or element have the opportunity to create a co-evolution across multiple elements, opening up further potential innovation elsewhere (Watson, 2012). What is also highlighted here is the unintended consequences of interventions. While a number of interventions in this research attempted to grow cycle usage, a number have resultantly failed and instead contributed to either processes of persistence in the case of Tynebikes and its campaigning approach, or even failure develop cycling practices through both of Tynebikes' and The Cycle Hubs attempts to cross-fertilise practices.

10.2 Recommendations for Further Research

The research focused on the contribution of three social sites to cycling cultures, but there leaves further opportunity to utilise practice theory in alternate ways which can provide further insight into practices of cycling. The following three opportunities are borne out of the research. First I highlight the importance to further investigate the wider system of practice within cycling; before then turning to focus on practice-as-performance in two ways, the first, highlighting the importance to understanding the broader relationships of practices within everyday life; and secondly, further investigation into the variations of cycling and the subsequent association or disassociation between cycling practices.

10.2.1 Opportunities of Intervention in Systems of Practice

As practice theory suggests through its definition of a system of practice, processes of change are rarely entirely reliant with the practice concerned, "rather they arise because of the shifting relative location of a practice within broader systems of practice" (Watson, 2012, p.491). As raised in this research, cycling social sites are just one actor engaged in the production and formulation of elements associated with cycling. For Tynebikes and Newcycling, the city council and more specifically the practices of engineers and planners themselves (for Newcycling) were identified as points of intervention that could inform a wider regime change associated to planning for the system of automobility. In understanding how such roles, institutions and policy domains are structured may contribute further insight into how practices of mobility are organised, constructed and dominate over one another (Macrorie, Daly and Spurling, 2014). As is highlighted in this research, both the system of

automobility and velomobility are in competition with one another. For a transition away from automobility and towards velomobility, transitions can refer to minor tipping points or a series of thresholds being reached, contributing to momentum in which cycling can be viewed as normal and a legitimate mode of transportation (Watson, 2012). Further understanding in identifying these potential 'tipping points' both past and present would provide opportunity to envision further shifts in recruitment to cycling.

10.2.2 Relationships between Practices, Cycling in Everyday Life

Whilst this thesis engaged with stakeholders of the social sites and explored practices of cycling on a 'practice-as-entity' level, this recommendation emphasises the understanding of 'practice-as-performance' and the subsequent interaction and relationships between practices. Practices may bundle together to form 'complexes' that structure the majority of an individual's daily-life (Schatzki, 2015). Using the social sites as ways in to the field would help uncover and analyse how performances of cycling potentially feature in and bundle together with other practices currently. Understanding how cycling may form cooperative relationships, become bundled with, or compete with other practices would assist in understanding the everyday negotiation and interaction between practices of people who cycle. Engaging with individuals who do not cycle may also help to identify further opportunities and barriers to cycling that are not specific to the practice but rather a result of the wider interaction and negotiation of practices throughout an individual's life course.

10.2.3 Understanding Cycling Careers

Chapter 9.2.2 referred to the process of cross-fertilisation whereby variants of cycling are somewhat relational to one another as a result of the potential elements that they have in common. Whilst this is generally conceived in practice theory literature as acting as a connective tissue, a common ground and zones of overlap between separate and distinct practices, I specify its potential with regards to further understanding both connection and dis-connection between variants of cycling. Here I highlight the potential to understand both 'sticky' and 'fragile' relationships between different performances of cycling, which may shed further insight into processes of cross-fertilisation of cycling. It is queried whether potential transitions or relationships between cycling variants exist and how this may be used in future interventions at a practice-as-entity level. In studying these performances, Pink's

(2012) ethnographic approach would encourage further questioning of how does performances intersect with the sensory experience, sights and smells of a journey, or even the weather.

10.3 Summary

This research has shown that trajectories of cycling are complex. The findings reflect Cox's (2015) idea of there being many 'cyclings', that is cycling is not a singular practice. As such the three social sites reflect and reveal a diverse and complex assemblage of cycling cultures. Given the widely perceived imperative of growing cycle use in the UK, this research shows that growing cycling is not a simple case of focusing on changing individual behavioural decision-making. Rather, as Shove (2012) argues in the case of energy consumption, such a shift would best be facilitated through situating such a focus within and alongside a broader understanding of cycling as a practice in which opportunities of change exist through the interventions of social practices. This research has shown that whilst cities may experience a low cycling share, performances of cycling and cycling social sites are still numerous and multiple. Referring to both historical and contemporary social sites has enabled an understanding of how practices of cycling change through time and how advocacy responds to this and the wider political environment.

Social sites advocate for the growth of cycling (either consciously or unconsciously), but their affect on the practice is more than just a simple trajectory. Rather, I have argued that social sites contribute to the birth, growth, maintenance and even decline of cycling practices. Such affects on trajectories of cycling are not simply a result of introducing new elements, but also the result of social sites innovating existing practices through the re-ordering of elements as well as popularising and maintaining existing performances. While it was argued that individual behavioural decision-making is decentred as a fundamental process of enabling cycle growth, this research did highlight the importance of social sites such as campaign groups and cycle hubs and how their participants' experiences of cycling change the trajectory of cycling in their city. Stakeholders and cyclists themselves are caught up in the practice of cycling, in a way that potentially enables cycle growth through the recruitment of new individuals but also potentially (unknowingly) restricting performances to a select population who will be willing to cycle. Therefore, as practice theory posits, practices are dynamic and continually changing and being shaped though the performances that culminate

in a practice entity. In answering the current challenges global warming and climate change pose, the rise in cycle growth may not only come from new understandings and elements configured into the practice. It may also come from the configuration and innovation of existing elements, as well as the crossover of other variants of cycling not conceived as utility in nature. Fundamentally however the research has argued to move beyond individualism as a mechanism of change and has instead situated change within the social configurations of the practices we as individuals perform through our day-to-day lives.

Bibliography

Active Newcastle. (n.d) *Cycling in the City - Social Bike Rides* [online]. Available at: http://activenewcastle.co.uk/club/citc-social-bike-rides/ (Accessed: 07 July 2016).

Agar, M. (1996) *The professional stranger: an informal introduction to ethnography*. 2nd edn. San Diego: Academic Press.

Ajzen, I. (1991) 'The theory of planned behaviour', *Organizational Behaviour and Human Decision Processes*, 50(2), pp. 179-211.

Aldred, R. (2010) ''On the outside': constructing cycling citizenship', *Social & Cultural Geography*, 11(1), pp. 35-52.

Aldred, R. (2012a) *Cycling cultures. Summary of key findings and recommendations* [pdf]. Available at: http://www.cycling-embassy.org.uk/sites/cycling-embassy.org.uk/files/documents/Final-report-cycling-cultures.pdf [Accessed 09 November 2014].

Aldred, R. (2012b) 'The Role of Advocacy and Activism', in Parkin, J. (ed.) *Cycling and Sustainability (Transport and Sustainability, Volume 1)*. Emerald Group Publishing Limited, pp. 83-108.

Aldred, R. (2012c) 'Incompetent or Too Competent? Negotiating Everyday Cycling Identities in a Motor Dominated Society', *Mobilities*, 8(2), pp. 252-271.

Aldred, R. (2013) 'Who are Londoners on bikes and what do they want? Negotiating identity and issue definition in a 'pop-up' cycle campaign', *Journal of Transport Geography*, 30(0), pp. 194-201.

Aldred, R. and Dales, J. (2017) Diversifying and normalising cycling in London, UK: An exploratory study on the influence of infrastructure, *Journal of Transport & Health*, 4, pp.348-362.

Aldred, R. and Golbuff, L. (2011) *Cycling policy in the UK: A historical and thematic overview* [pdf]. Available at: http://rachelaldred.org/wp-content/uploads/2012/10/cycling-review1.pdf [Accessed 02 October 2014].

Aldred, R. and Goodman, A. (2018) Predictors of the frequency and subjective experience of cycling near misses: Findings from the first two years of the UK Near Miss Project, *Accident Analysis and Prevention*, 110, pp.161-170.

Aldred, R. and Jungnickel, K. (2012) 'Constructing Mobile Places between 'Leisure' and 'Transport': A Case Study of Two Group Cycle Rides', *Sociology*, 46(3), pp. 523-539.

Aldred, R. and Jungnickel, K. (2013) 'Matter in or out of place? Bicycle parking strategies and their effects on people, practices and places', *Social & Cultural Geography*, 14(6), pp. 604-624.

Aldred, R. and Jungnickel, K. (2014) 'Why culture matters for transport policy: the case of cycling in the UK', *Journal of Transport Geography*, 34(0), pp. 78-87.

Aldred, R. and Woodcock, J. (2015) Reframing safety: An analysis of perceptions of cycle safety clothing, *Transport Policy*, 42, pp.103-112.

Aldred, R., Woodcock, J. and Goodman, A. (2016) Does More Cycling Mean More Diversity in Cycling?, *Transport Reviews*, 36(1), pp.28-44.

Alkemeyer, T. and Buschmann, N. (2017) 'Learning in and across practices: enablement as subjectivation', in Hui, A., Schatzki, T.R. and Shove, E. (eds.) *The Nexus of Practices: Connections, constellations, practitioners*. London: Routledge, pp. 8-23.

Andrews, N., Clement, I., Aldred, R. (2018) Invisible cyclists? Disabled people and cycle planning – a case study of London, *Journal of Transport & Health*, 8, pp.146–156.

Attoh, K.A. (2011) 'What kind of right is the right to the city?'. *Progress in Human Geography*, 35(5), pp. 669-685.

Attoh, K.A. (2012) 'The Transportation Disadvantaged and the Right to the City in Syracuse, New York', *The Geographical Bulletin*, 53(1).

Balkmar, D. and Summerton, J. (2017) 'Contested mobilities: politics, strategies and visions in Swedish bicycle activism', *Applied Mobilities*, pp. 1-15.

Bamberg, S., Fujii, S., Friman, M. and Gärling, T. (2011) 'Behaviour theory and soft transport policy measures', *Transport Policy*, 18(1), pp. 228-235.

Banister, D. (2005) *Unsustainable transport: city transport in the new century*. London: Routledge.

Batterbury, S. (2003) 'Environmental Activism and Social Networks: Campaigning for Bicycles and Alternative Transport in West London', *The ANNALS of the American Academy of Political and Social Science*, 590(1), pp. 150-169.

Batterbury, S. and Vandermeersch, I. (2016) 'Community bicycle workshops and "invisible cyclists" in Brussels', in Golub, A., Hoffmann, M.L., Lugo, A.E. and Sandoval, G.F. (eds.) *Bicycle justice and urban transformation: biking for all?* Oxon: Routledge.

Bell, C. (1977) 'Reflections on the Banbury Restudy', in Bell, C. and Newby, H. (eds.) *Doing sociological research*. London: Allen and Unwin, pp. 47-62.

Bell, D. and Davoudi, S. (2016) Understanding justice and fairness in and of the city. In Davoudi, S. and Bell, D. (Eds). *Justice and Fairness in the City. A Multi-Disciplinary Approach to 'Ordinary' Cities*. Bristol: Policy Press.

Bernard, H.R. (2006) *Research Methods in Anthropology. Qualitative and Quantitative Approaches*. 4th edn. Oxford: AltaMira Press.

Bloomberg, L.D. and Volpe, M.F. (2012) *Completing your qualitative dissertation: a road map from beginning to end*. 2nd edn. Thousand Oaks: Sage Publications.

Blue, S. and Spurling, N. (2017) 'Qualities of connective tissue in hospital life: how complexes of practices change', in Hui, A., Schatzki, T.R. and Shove, E. (eds.) *The Nexus of Practices: Connections, constellations, practitioners*. London: Routledge, pp. 24-37.

Bohm, S., Jones, C., Land, C. and Paterson, M. (2006) 'Impossibilities of automobility', in Bohm, S., Jones, C., Land, C. and Paterson, M. (eds.) *Against Automobility*. Oxford: Blackwell.

Brand, K.-W. (2010) 'Social Practices and Sustainable Consumption: Benefits and Limitations of a New Theoretical Approach', in Gross, M. and Heinrichs, H. (eds.) *Environmental Sociology: European Perspectives and Interdisciplinary Challenges*. Dordrecht: Springer Netherlands, pp. 217-235.

British Cycling. (n.d) *Lets Ride* [online]. Available at: https://www.letsride.co.uk/ [Accessed 07 July 2016].

Bryman, A. (1993) *Quantity and quality in social research*. London; New York: Routledge.

Bryman, A. (2016) *Social research methods*. Fifth edition. edn. Oxford: Oxford University Press.

Buehler, R. and Dill, J. (2016) Bikeway Networks: A Review of Effects on Cycling, *Transport Reviews*, 36(1), pp.9-27.

Burgess, R.G. (1984) *In the field: an introduction to field research*. London; Boston: G. Allen & Unwin.

Burgess, R.G. (1991) *Field research: a sourcebook and field manual*. London: Routledge.

Buss, A. and Lardy, J. (2015) 'A New Community Space: The Culture of the Urban Bike Cafe', *Spaces and Flows: An International Journal of Urban and Extra Urban Studies*, 5(3-4), pp. 13-24.

Byrne, B. (2012) 'Qualitative Interviewing', in Seale, C. (ed.) *Researching society and culture*. 3rd edn. Thousand Oaks, CA: SAGE Publications.

Cass, N. and Faulconbridge, J. (2016) 'Commuting practices: New insights into modal shift from theories of social practice', *Transport Policy*, 45, pp. 1-14.

Cassell, C. and Symon, G. (1994) *Qualitative methods in organizational research: a practical guide*. London: Sage.

Clifford, J. (1990) 'Notes on (field)notes', in Sanjck, R. (ed.) *Fieldnotes: the makings of anthropology*. Ithaca: Cornell University Press, pp. 47-70.

Cook, I. (2005) 'Participant Observation', in Flowerdew, R. and Martin, D. (eds.) *Methods in human geography: a guide for students doing a research project*. 2nd edn. Harlow: Prentice Hall.

Cox, P. (2015) *Cycling Cultures*. Chester: University of Chester Press.

Craven, L. (ed.) *What are archives? Cultural and theoretical perspectives: a reader*. Aldershot, Hants: Ashgate.

Cresswell, T. (2006) 'The Right to Mobility: The Production of Mobility in the Courtroom', *Antipode*, 38(4), pp. 735-754.

Cycling in the City. (n.d) *Ride Social* [online]. Available at: http://cyclinginthecity.activenewcastle.co.uk/rides/ride-social/. [Accessed 07 July 2016].

Daley, M. and Rissel, C. (2011) Perspectives and images of cycling as a barrier or facilitator of cycling, *Transport Policy*, 18, pp.211-216.

Damianakis, T. and Woodford, M.R. (2012) 'Qualitative research with small connected communities: Generating new knowledge while upholding research ethics', *Qualitative Health Research*, 22(5), pp. 708-718.

Davies, D., Halliday, M., Mayes, M. and Pocock, R. (1997) *Attitudes to cycling: a qualitative study and conceptual framework*.

De la Bruheze, A. (2000) *Bicycle use in twentieth century Western Europe: the comparison of nine cities* [pdf]. Available at: http://www.velomondial.net/velomondiall2000/PDF/BRUHEZE.PDF [Accessed 20 May 2015].

Dennis, K. and Urry, J. (2009) *After the car*. Cambridge; Malden, MA: Polity.

Denzin, N.K. (1970) *The research act in sociology: a theoretical introduction to sociological methods*. London: Butterworths.

Department for Transport (2019) *Average number of trips made and distance travelled*. Available at: https://www.gov.uk/government/statistical-data-sets/nts01-average-number-of-trips-made-and-distance-travelled [Accessed 28 August 2019].

Dewalt, K.M., Dewalt, B.R. and Wayland, C.B. (1998) 'Participant observation', in Bernard, H.R. (ed.) *Handbook of methods in cultural anthropology*. Walnut Creek, CA: AltaMira, pp. 259-299.

DfT (2008) *Cycle Infrastructure Design: Local Transport note 2/08* [online]. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data /file/329150/ltn-2-08_Cycle_infrastructure_design.pdf [Accessed 10 September 2015].

Dill, J. and McNeil, N. (2012) *Four types of cyclists? Testing a typology to better understand bicycling behavior and potential* [pdf]. Available at: http://web.pdx.edu/~jdill/Types_of_Cyclists_PSUWorkingPaper.pdf [Accessed 10 September 2015].

Ellis, C. (2007) 'Telling Secrets, Revealing Lives: Relational Ethics in Research With Intimate Others', *Qualitative Inquiry*, 13(1), pp. 3-29.

Emanuel, M. (2012) 'Constructing the cyclist: Ideology and representations in urban traffic planning in Stockholm, 1930-70', *Journal of Transport History*, 33(1), pp. 67-91.

Erlandson, D.A., Harris, E.L., Skipper, B.L. and Allen, S.D. (1993) *Doing naturalistic inquiry: a guide to methods*. Newbury Park, Calif.: Sage.

Eurostat (2017) *Greenhouse gas emission statistics – emission inventories* [online]. Available at: http://ec.europa.eu/eurostat/statistics-explained/index.php/Greenhouse_gas_emission_statistics#Further_Eurostat_information [Accessed 04 May 2018].

Evening Chronicle (1983) Pedallers call for better deal, *Evening Chronicle*, 27 October, p.14.

Facebook (2018) *SPACE for Gosforth*. [online] Available at: https://www.facebook.com/groups/space.gosforth/ [Accessed 8 March 2018].

Fincham, B. (2007). Bicycle Messengers: Image, Identity and Community. In Rosen, P., Cox, P. and Horton, D. (Eds.), *Cycling and society*. Aldershot: Ashgate, pp. 133–152.

Fischer, F. (2009) 'Discursive Planning: Social Justice as Discourse', in Marcuse, P., Connelly, J., Novy, J., Olivo, I., Potter, C. and Steil, J. (eds.) *Searching for the Just City: debates in urban theory and practice*. London: Routledge.

Flanagan, E., Lachapelle, U. and El-Geneidy, A. (2016) Riding tandem: Does cycling infrastructure investment mirror gentrification and privilege in Portland, OR and Chicago,

IL?, *Research in Transportation Economics*, 60, pp.14-24.

Forester, J. (1992) *Effective Cycling*. Cambridge, Massachusetts: MIT Press.

Furness, Z.M. (2010) *One less car: bicycling and the politics of automobility*. Philadelphia: Temple University Press.

Gans, H. (1991) 'The Participant Observer as a Human Being: Observations on the Personal Aspects of Fieldwork', in Burgess, R.G. (ed.) *Field research: a sourcebook and field manual*. London: Routledge, pp. 80-93.

Gatersleben, B. and Haddad, H. (2010) 'Who is the typical bicyclist?', *Transportation Research Part F: Traffic Psychology and Behaviour*, 13(1), pp. 41-48.

Gateshead Council (2015) *Traffic Flows in Tyne and Wear. 2015 Report (Appendix). Tyne and Wear Traffic and Accident Data Unit* [pdf]. Available at: http://www2.gateshead.gov.uk/DocumentLibrary/Transport/TADU/traffic-flows-report-2015-appendix.pdf [Accessed 24 September 2016].

Gateshead Council and Newcastle City Council (n.d) *Core Strategy and Urban Core Plan for Gateshead and Newcastle 2010-2030.* [online] Available at: https://www.gateshead.gov.uk/media/7765/Core-Strategy-and-Urban-Core-Plan-for-Gateshead-and-Newcastle/pdf/Core-Strategy-and-Urban-Core-Plan-for-Gateshead-and-Newcastle_SMALLER.pdf [Accessed 25 May 2018].

Geels, F. and Schot, J. (2010) The Dynamics of Transition: A Socio-Technical Perspective. In: Grin, J., Rotmans, J. and Schot, J (Eds) *Transition to Sustainable Development*. Oxon: Routledge, pp.93-101.

George, D. (2014) 'Organizing a Coincidence: Identity Work and Activism among Local Critical Mass Enthusiasts', *Journal of Contemporary Ethnography*.

Giddens, A. (1984) *The constitution of society: outline of the theory of structuration*. Cambridge: Polity Press.

Goodman, A. and Aldred, R. (2018) Inequalities in utility and leisure cycling in England, and variation by local cycling prevalence, *Transportation Research Part F*, 56, pp.381-391.

Gov.uk (2013) *Cycle city ambition grants: application grants for 2013*. [Online] 15 April, Available at: https://www.gov.uk/government/publications/cycle-city-ambition-grants [Accessed 17 March 2017].

Gov.uk (2018) How people travel (mode of transport). Available at: https://www.gov.uk/government/statistical-data-sets/nts03-modal-comparisons [Accessed 01 August 2018].

Guba, E.G. and Lincoln, Y.S. (1994) 'Competing Paradigms in Qualitative Research', in Denzin, N.K. and Lincoln, Y.S. (eds.) *Handbook of Qualitative Research*. Thousand Oaks, CA: SAGE Publications, pp. 105-117.

Gunn, S. (2010) The Rise and Fall of British Urban Modernism: Planning Bradford, Circa 1945–1970, *The Journal of British Studies,* 49(4), pp.849–869.

Haake, B (2009) The Importance of Bicyclist Education. *World Transport Policy and Practice*, 15 (1), pp. 47-56.

Hammersley, M. (1998) *Reading ethnographic research: a critical guide*. 2nd edn. London: Longman.

Hammersley, M. and Atkinson, P. (1995) *Ethnography: principles in practice*. 2nd edn. London: Routledge.

Hammersley, M. and Atkinson, P. (2007) *Ethnography: principles in practice*. 3rd edn. London: Routledge.

Hargreaves, T. (2011) 'Practice-ing behaviour change: Applying social practice theory to pro-environmental behaviour change', *Journal of Consumer Culture*, 11(1), pp. 79-99.

Hargreaves, T., Longhurst, N. and Seyfang, G. (2013) 'Up, Down, round and round: Connecting Regimes and Practices in Innovation for Sustainability', *Environment and Planning A*, 45(2), pp. 402-420.

Harvey, D. (2009) *Social justice and the city*. Athens Ga.; London: University of Georgia Press.

Harvey, D. and Potter, C. (2009) 'The Right to the Just City', in Marcuse, P., Connelly, J., Novy, J., Olivo, I., Potter, C. and Steil, J. (eds.) *Searching for the Just City: debates in urban theory and practice*. London: Routledge.

Henderson, T. (2000) Fed-up cyclists want to ride beside the sea, *The Journal*, 23 December.

Hill, M.R. (1993) *Archival strategies and techniques*. Newbury Park, Calif.: Sage Publications.

Hitchings, R. (2012) 'People can talk about their practices', *Area*, 44(1), pp. 61-67.

Horton, D. (2006) 'Demonstrating environmental citizenship? A study of everyday life among green activists', in Dobson, A. and Bell, D. (eds.) *Environmental Citizenship*. London: MIT Press, pp. 127-150.

Horton, D. (2007). Fear of cycling. In Rosen, P., Cox. P and Horton, D. (Eds.), *Cycling and society*. Aldershot: Ashgate, pp.133-152.

Horton, D., Rosen, P. and Cox, P. (2007) 'Introduction: cycling and society', in Rosen, P., Cox, P. and Horton, D. (eds.) *Cycling and society*. Aldershot: Ashgate, pp. 1-23.

Hui, A. (2013) 'Practices, Movement and Circulation: Implications for Sustainability', in Shove, E. and Spurling, N. (eds.) *Sustainable Practices. Social theory and climate change*. London: Routledge, pp. 89-102.

Hui, A. (2017) 'Variation and the intersection of practices', in Hui, A., Schatzki, T.R. and Shove, E. (eds.) The Nexus of Practices: Connections, constellations, practitioners. London: Routledge, pp. 52-67.

John Grimshaw & Associates and Department of Transport (1982) Study of disused railways in England and Wales: potential cycle routes: a study for the Department of Transport. London: H.M.S.O.

Jonas, L. (2017) 'The making of a pro-cycling city: Social practices and bicycle mobilities', *Environment and Planning A*, 49(4), pp. 876-892.

Jungnickel, K. and Aldred, R. (2014) 'Cycling's Sensory Strategies: How Cyclists Mediate their Exposure to the Urban Environment', *Mobilities*, 9(2), pp. 238-255.

Kelly, R. (1987) Cycles replace trains on Tyneside track, *Telegraph*, 13 November.

Kuijer, L. (2014) *A call for more practice theory on the future* [pdf]. Available at: http://www.demand.ac.uk/wp-content/uploads/2014/07/wp-12-kuijer.pdf [Accessed 17 September 2015].

Kwan, M.-P. (2013) 'Beyond Space (As We Knew It): Toward Temporally Integrated Geographies of Segregation, Health, and Accessibility', *Annals of the Association of American Geographers*, 103(5), pp. 1078-1086.

Latham, A. and Wood, P.R.H. (2015) 'Inhabiting infrastructure: exploring the interactional spaces of urban cycling', *Environment and Planning A*, 47(2), pp. 300-319.

Latour, B. and Woolgar, S. (1986) *Laboratory life: the construction of scientific facts*. Princeton, N.J.: Princeton University Press.

Lave, J. and Wenger, E. (1991) *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge University Press.

Law, J. (1994) *Organizing modernity*. Oxford, UK; Cambridge, Mass., USA: Blackwell.

Lefebvre, H. (1996) *Writing on Cities*. Oxford: Blackwell.

Loorbach, D. and Rotmans, J. (2010) 'The practice of transition management: Examples and lessons from four distinct cases', *Futures*, 42(3), pp. 237-246.

Lovejoy, K. and Handy, S (2012) Developments in Bicycle Equipment and Its Role in Promoting Cycling as a Travel Mode. In Pucher, J. and Buehler. R, (Eds) *City Cycling*. Cambridge, MIT.

Lucas, K. (2004) *Running on empty: transport, social exclusion and environmental justice*. Bristol: Policy Press.

Macrorie, R., Daly, M. and Spurling, N. (2014) 'Can 'systems of practice' help to analyse wide-scale socio-technical change?', in Foulds, C. and Jensen, C.L. (eds.) *Practices, the Built Environment and Sustainability - A Thinking Note Collection*. Cambridge, Copenhagen, London: GSI, DIST, BSA CCSG.

Macrorie, R., Royston, S. and Daly, M. (2014) 'The role of 'Communities of Practice' within the built environment', in Foulds, C. and Jensen, C.L. (eds.) *Practices, the Built Environment and Sustainability - A Thinking Note Collection.* Cambridge, Copenhagen, London: GSI, DIST, BSA CCSG.

Martens, K. (2017) *Transport justice: designing fair transportation systems*. London: Routledge.

Mason, J. (1996) *Qualitative researching*. London; Thousand Oaks, Calif: SAGE Publications.

Mason, J. (2002) *Qualitative Researching*. Second edn. London, Thousand Oaks: SAGE Publications.

Matless, D. (1995) ''The Art of Right Living': Landscape and Citizenship, 1918-39', in Pile, S. and Thrift, N. (eds.) *Mapping the Subject: Geographies of Cultural Transformation*. London: Routledge, pp. 85-113.

Matless, D. (1998) *Landscape and Englishness*. London, Reaktion Books.

McClintock, H. (2002) *Planning for cycling principles, practice, and solutions for urban planners*. Cambridge, England: Woodhead Pub.

Morris, J., Marzano, M., Dandy, N. and O'Brien, L. (2012) *Theories and models of behaviour and behaviour change* [pdf]. Available at: http://www.forestry.gov.uk/pdf/behaviour_review_theory.pdf/$FILE/behaviour_review_theory.pdf [Accessed 01 July 2015].

Nettleton, S. and Green, J. (2014) 'Thinking about changing mobility practices: how a social practice approach can help', *Sociology of Health & Illness*, 36(2), pp. 239-251.

Newcastle City Council (1991) *Cycling policy and plan.*

Newcastle City Council (1998) *Cycling Strategy.*

Newcastle City Council (2011) *Delivering Cycling Improvements in Newcastle, a Ten Year Strategy (2011-2021).* [online] Available at:

https://www.newcastle.gov.uk/sites/default/files/wwwfileroot/parking-roads-and-transport/cycling/af191248pd_cycling_brochure_2.pdf [Accessed 28 November 2017].

Newcastle City Council (2013) *Newcastle Fit for Cycling. Cycle City Ambition bid.* [online] Available at: https://www.newcastle.gov.uk/sites/default/files/wwwfileroot/parking-roads-and-transport/cycling/newcastle_cycle_city_ambition_business_case.pdf [Accessed 8 March 2018].

Newcastle City Council and Sustrans (2017) *Bike Life. Newcastle.* [online] Available at: https://www.sustrans.org.uk/sites/default/files/file_content_type/bike-life-newcastle-2017-report.pdf [Accessed 7 March 2018].

Newcastle County Council (1975) *A Cycleway System for Newcastle.*

Newcastle Cycling Campaign (2011) *A Fair Slice (originally guest post in Spokeswomen).* [online] (29 November 2011) Available at: http://newcycling.org/fair-slice-originally-guest-post-spokeswomen/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2012) *Stricter liability - the call for a fairer system for all.* [online] (31 August 2012) Available at: http://newcycling.org/stricter-liability-call-fairer-system-all/ [Accessed 10 June 2018].

Newcastle Cycling Campaign (2013a) *"Love Cycling - Go Dutch Conference" comes to Newcastle.* [online] (29 June 2013) Available at: http://newcycling.org/love-cycling-go-dutch-conference-comes-newcastle/ [Accessed 30 November 2017].

Newcastle Cycling Campaign (2013b) *Is Newcastle Fit for Cycling.* [online] (06 May 2013) Available at: http://newcycling.org/newcastle-fit-cycling-2/ [Accessed 05 June 2018].

Newcastle Cycling Campaign (2013c) *Cycling to West Jesmond School.* [online] (06 March 2013) Available at: http://newcycling.org/cycling-west-jesmond-school/ [Accessed 05 June 2018].

Newcastle Cycling Campaign (2013d) *Getting to the core of 1Core (cont).* [online] (20 October 2013) Available at: http://newcycling.org/getting-core-1core-cont/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2013e) *YouReport - tell us your story*. [online] (10 May 2013) Available at: http://newcycling.org/youreport-tell-us-your-story/ [Accessed 17 May 2018].

Newcastle Cycling Campaign (2013f) *News clippings - Cyclists in calls for bike photographs*. [online] (05 August 2013) Available at: http://newcycling.org/news-clippings-cyclists-call-bike-photographs/ [Accessed 17 May 2018].

Newcastle Cycling Campaign (2013g) *Scott reports from Amsterdam*. [online] (29 November 2013) Available at: http://newcycling.org/scott-reports-amsterdam/ [Accessed 17 May 2018].

Newcastle Cycling Campaign (2013h) *Pen reports from Kiel*. [online] (07 August 2013) Available at: http://newcycling.org/pen-reports-kiel/ [Accessed 14 May 2018].

Newcastle Cycling Campaign (2013i) *Mima reports from Helsinki*. [online] (27 May 2013) Available at: http://newcycling.org/mima-reports-helsinki/ [Accessed 17 May 2018].

Newcastle Cycling Campaign (2013j) *Carole reports from Bilbao*. [online] (20 September 2013) Available at: http://newcycling.org/carole-reports-bilbao/ [Accessed 17 May 2018].

Newcastle Cycling Campaign (2013k) *Julie reports from Barcelona*. [online] (17 August 2013) Available at: http://newcycling.org/julie-reports-barcelona/ [Accessed 14 May 2018].

Newcastle Cycling Campaign (2013l) *Shannon reports from northern California*. [online] (01 June 2013) Available at: http://newcycling.org/shannon-reports-northern-california/ [Accessed 17 May 2018].

Newcastle Cycling Campaign (2013m) *Bruce reports from Montreal*. [online] (13 September 2013) Available at: http://newcycling.org/bruce-reports-montreal/ [Accessed 15 May 2018].

Newcastle Cycling Campaign (2013n) *Shaun reports from Rotterdam*. [online] (01 November 2013) Available at: http://newcycling.org/shaun-reports-rotterdam/ [Accessed 15 May 2018].

Newcastle Cycling Campaign (2013o) *George reports from Vienna*. [online] (07 June 2013) Available at: http://newcycling.org/george-reports-vienna/ [Accessed 17 May 2018].

Newcastle Cycling Campaign (2013p) *Carole reports from Estepona*. [online] (23 August 2013) Available at: http://newcycling.org/bruce-reports-vancouver/ [Accessed 14 May 2018].

Newcastle Cycling Campaign (2013q) *Mark reports from Sydney*. [online] (25 October 2013) Available at: http://newcycling.org/mark-reports-sydney/ [Accessed 15 May 2018].

Newcastle Cycling Campaign (2013r) *Bruce reports from Vancouver*. [online] (04 October 2013) Available at: http://newcycling.org/bruce-reports-vancouver/ [Accessed 15 May 2018].

Newcastle Cycling Campaign (2013s) *George reports from Dublin*. [online] (18 May 2013) Available at: http://newcycling.org/george-reports-dublin/ [Accessed 15 May 2018].

Newcastle Cycling Campaign (2013t) *Russ reports from Hanover*. [online] (28 June 2013) Available at: http://newcycling.org/russ-reports-hanover/ [Accessed 17 May 2018].

Newcastle Cycling Campaign (2013u) *James reports from Sevilla*. [online] (15 June 2013) Available at: http://newcycling.org/james-reports-sevilla/ [Accessed 17 May 2018].

Newcastle Cycling Campaign (2013v) *YouReport - and the winner is*. [online] (07 December 2013) Available at: http://newcycling.org/youreport-and-winner/ [Accessed 10 June 2018].

Newcastle Cycling Campaign (2013w) *George reports from Dublin (again)*. [online] (08 November 2013) Available at: http://newcycling.org/george-reports-dublin-again/ [Accessed 15 May 2018].

Newcastle Cycling Campaign (2013x) *Katja reports from London*. [online] (27 September 2013) Available at: http://newcycling.org/katja-reports-london/ [Accessed 15 May 2018].

Newcastle Cycling Campaign (2013y) *Road space re-allocation (1/6)*. [online] (20 December 2013) Available at: http://newcycling.org/part1/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2013z) *Road classification and space clarity (2/6)*. [online] (27 December 2013) Available at: http://newcycling.org/part2/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2013aa) *Hot air and still no safe space*. [online] (15 June 2013) Available at: http://newcycling.org/hot-air-and-still-no-safe-space/ [Accessed 04 June 2018].

Newcastle Cycling Campaign (2013ab) *Claire reports from Assen*. [online] (21 June 2013) Available at: http://newcycling.org/claire-reports-assen/ [Accessed 15 May 2018].

Newcastle Cycling Campaign (2013ac) *Tony reports from the Netherlands*. [online] (05 July 2013) Available at: http://newcycling.org/tony-reports-netherlands/ [Accessed 17 May 2018].

Newcastle Cycling Campaign (2013ad) *Katja reports from "Harz und Heide"*. [online] (13 July 2013) Available at: http://newcycling.org/katja-reports-harz-und-heide/ [Accessed 17 May 2018].

Newcastle Cycling Campaign (2013ae) *Peter reports from Berlin*. [online] (12 May 2013) Available at: http://newcycling.org/peter-reports-berlin-0/ [Accessed 17 May 2018].

Newcastle Cycling Campaign (2013af) *Farah reports from Paris*. [online] (20 July 2013) Available at: http://newcycling.org/farah-reports-paris/ [Accessed 17 May 2018].

Newcastle Cycling Campaign (2014a) *People put first in the city centre*. [online] (30 April 2014) Available at: http://newcycling.org/people-put-first-city-centre/ [Accessed 24 May 2018].

Newcastle Cycling Campaign (2014b) *Council cuts and desperate times? City must wake up to alternatives*. [online] (23 October 2014) Available at: http://newcycling.org/council-cuts-and-desperate-times-city-must-wake-alternatives/ [Accessed 24 May 2018].

Newcastle Cycling Campaign (2014c) *Message from a fellow cyclist*. [online] (13 March 2014) Available at: http://newcycling.org/message-fellow-cyclist/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2014d) *Human values of a liveable city*. [online] (21 April 2014) Available at: http://newcycling.org/human-values-liveable-city/ [Accessed 22 December 2017].

Newcastle Cycling Campaign (2014e) *Six building blocks*. [online] (08 February 2014) Available at: http://newcycling.org/s4cbuildingblocks/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2014f) *Information campaigns (6/6)*. [online] (24 January 2014) Available at: http://newcycling.org/part6/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2014g) *Holding politicians to account*. [online] (12 February 2014) Available at: http://newcycling.org/holding-politicians-account/ [Accessed 10 June 2018].

Newcastle Cycling Campaign (2014h) *Position statement - Our Vision for Newcastle*. [online] (30 November 2014) Available at: http://newcycling.org/position-statement-our-vision-for-newcastle/ [Accessed 22 December 2017].

Newcastle Cycling Campaign (2014i) *Our assessment of plans for SCR1 Newburn*. [online] (09 July 2014) Available at: http://newcycling.org/our-assessment-plans-scr1-newburn/ [Accessed 10 June 2018].

Newcastle Cycling Campaign (2014j) *Our response to the National Cycling Delivery Plan*. [online] (31 October 2014) Available at: http://newcycling.org/our-response-national-cycling-delivery-plan/ [Accessed 04 June 2018].

Newcastle Cycling Campaign (2014k) *Road safety campaigns are pointless if we are not prepared to rethink road designs*. [online] (10 June 2014) Available at: http://newcycling.org/road-safety-campaigns-are-pointless-if-we-are-not-prepared-rethink-road-designs/ [Accessed 10 June 2018].

Newcastle Cycling Campaign (2014l) *A cycleway in Bondy, France*. [online] (18 October 2014) Available at: http://newcycling.org/cycleway-bondy-france/ [Accessed 18 May 2018].

Newcastle Cycling Campaign (2014m) *Tfl - LCDS consultation*. [online] (11 August 2014) Available at: http://newcycling.org/tfl-lcds-consultation/ [Accessed 05 June 2018].

Newcastle Cycling Campaign (2014n) *1/5 Sustainable Safety principle - Functionality*. [online] (30 August 2014) Available at: http://newcycling.org/sustainablesafety1/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2014o) *Traffic calming and routing measures (3/6)*. [online] (03 January 2014) Available at: http://newcycling.org/part3/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2014p) *Safe junctions and crossings (4/6)*. [online] (10 January 2014) Available at: http://newcycling.org/part4/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2014q) *Speed reduction (5/6)*. [online] (17 January 2014) Available at: http://newcycling.org/part5/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2014r) *Cycling in Nantes, France*. [online] (29 August 2014) Available at: http://newcycling.org/cycling-nantes-france/ [Accessed 18 May 2018].

Newcastle Cycling Campaign (2015a) *Newcycling: a focused campaign*. [online] (14 November 2015) Available at: https://www.slideshare.net/Katsdekker/esrccaad-claire-prospert [Accessed 22 December 2017].

Newcastle Cycling Campaign (2015b) *Councils must get down to human scale*. [online] (06 January 2015) Available at: http://newcycling.org/councils-must-get-down-to-human-scale/ [Accessed 22 December 2017].

Newcastle Cycling Campaign (2015c) *Council will you please listen and help*. [online] (14 February 2015) Available at: http://newcycling.org/council-will-you-please-listen-and-help/ [Accessed 22 December 2017].

Newcastle Cycling Campaign (2015d) *We know exactly what we want: a fairer city for all*. [online] (23 June 2015) Available at: http://newcycling.org/we-know-exactly-what-we-want-a-fairer-city-for-all/ [Accessed 05 June 2018].

Newcastle Cycling Campaign (2015e) *Thoughts about The Big Pedal*. [online] (10 February 2015) Available at: http://newcycling.org/the-big-pedal/ [Accessed 22 December 2017].

Newcastle Cycling Campaign (2015f) *Position statement - Tour de France bidding*. [online] (23 January 2015) Available at: http://newcycling.org/position-statement-tour-de-france-bidding/ [Accessed 05 June 2018].

Newcastle Cycling Campaign (2015g) *Working together for a successful outcome requires accountability*. [online] (20 October 2015) Available at: http://newcycling.org/working-together-for-a-successful-outcome-requires-accountability/ [Accessed 10 June 2018].

Newcastle Cycling Campaign (2015h) *Budgeting the transport transition*. [online] (05 February 2015) Available at: http://newcycling.org/budgetting-the-transport-transition/ [Accessed 24 May 2018].

Newcastle Cycling Campaign (2015i) *Governing the transport transition*. [online] (10 December 2015) Available at: http://newcycling.org/governing-the-transport-transition/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2015j) *Let's talk about Haddrick's Mill mincer*. [online] (25 August 2015) Available at: http://newcycling.org/lets-talk-about-the-haddricks-mill-mincer/ [Accessed 10 June 2018].

Newcastle Cycling Campaign (2015k) *What is the price we pay for our transport system*. [online] (13 November 2015) Available at: http://newcycling.org/what-is-the-price-we-pay-for-our-transport-system/ [Accessed 10 June 2018].

Newcastle Cycling Campaign (2015l) *Campaign group - Infrastructure team*. [online] (28 January 2015) Available at: http://newcycling.org/campaign-group-infrastructure-team/ [Accessed 04 June 2018].

Newcastle Cycling Campaign (2015m) *Haddrick's Mill - what cycle provision is needed?*. [online] (02 October 2015) Available at: http://newcycling.org/haddricks-mill-what-cycle-provision-is-needed/ [Accessed 04 June 2018].

Newcastle Cycling Campaign (2015n) *Brandling Park plans including Village and school*. [online] (07 June 2015) Available at: http://newcycling.org/brandling-park-plans-including-village-and-school/ [Accessed 05 June 2018].

Newcastle Cycling Campaign (2015o) *Haddrick's Mill - Through Routes and Distributor Routes*. [online] (01 December 2015) Available at: http://newcycling.org/haddricks-mill-through-routes-and-distributor-roads/ [Accessed 04 June 2018].

Newcastle Cycling Campaign (2016a) *Council address 6 July 2016, Civic Centre*. [online] (07 July 2016) Available at: http://newcycling.org/council-address-6-july-2016-civic-centre/ [Accessed 04 June 2018].

Newcastle Cycling Campaign (2016b) *Gross Greenwash on Blue House roundabout*. [online] (25 July 2016) Available at: http://newcycling.org/gross-greenwash-on-blue-house-roundabout/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2016c) *NECA response - transport manifesto*. [online] (03 April 2016) Available at: http://newcycling.org/neca-response-transport-manifesto/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2016d) *Equality in expenditure? Not so*. [online] (27 May 2016) Available at: http://newcycling.org/equality-in-expenditure-not-so/ [Accessed 24 May 2018].

Newcastle Cycling Campaign (2016e) *Our response to DfT's CWIS*. [online] (17 April 2016) Available at: http://newcycling.org/our-response-to-dfts-cwis/ [Accessed 04 June 2018].

Newcastle Cycling Campaign (2016f) *Our response to urban congestion inquiry*. [online] (24 November 2016) Available at: http://newcycling.org/our-response-to-urban-congestion-inquiry/ [Accessed 10 June 2018].

Newcastle Cycling Campaign (2016g) *Suicide Cycling Newcastle*. [online] (14 March 2016) Available at: http://newcycling.org/suicide-cycling-newcastle/ [Accessed 10 June 2018].

Newcastle Cycling Campaign (2017a) *City4Kids - Newcastle's future*. [online] (16 September 2017) Available at: http://newcycling.org/city4kids-newcastles-future/ [Accessed 24 May 2018].

Newcastle Cycling Campaign (2017b) *Women and cycling - What is it to celebrate*. [online] (01 August 2017) Available at: http://newcycling.org/women-and-cycling-what-is-it-to-celebrate/ [Accessed 24 May 2018].

Newcastle Cycling Campaign (2017c) *Streets for People - general comment*. [online] (22 November 2017) Available at: http://newcycling.org/streets-for-people-general-comment/ [Accessed 10 June 2018].

Newcastle Cycling Campaign (2017d) *The school run: 'we are not welcome here'*. [online] (03 December 2017) Available at: http://newcycling.org/the-school-run-we-are-not-welcome-here/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2017e) *Freedom for my child - Jo's Story*. [online] (26 October 2017) Available at: http://newcycling.org/freedom-for-my-child-jos-story/ [Accessed 25 May 2018].

Newcastle Cycling Campaign (2017f) *Kidical Mass Newcastle*. [online] (13 October 2017) Available at: http://newcycling.org/kidical-mass-newcastle/ [Accessed 22 December 2017].

Newcastle Cycling Campaign (2017g) *Highlight of the 2017 AGM (part 1)*. [online] (29 April 2017) Available at: http://newcycling.org/highlights-of-the-2017-agm/ [Accessed 10 June 2018].

Newcastle Cycling Campaign (2017h) *Urban design - how to include cycling*. [online] (17 April 2017) Available at: http://newcycling.org/urban-design-how-to-include-cycling/ [Accessed 10 June 2018].

Newcastle Cycling Campaign (2017i) *Creating an inclusive Cycling Network*. [online] (20 October 2017) Available at: http://newcycling.org/creating-an-inclusive-cycling-network/ [Accessed 04 June 2018].

Newcastle Cycling Campaign (2017j) *Highlights of the 2017 AGM (part 2)*. [online] (03 June 2017) Available at: http://newcycling.org/highlights-of-the-2017-agm-part-2/ [Accessed 10 June 2018].

Newcastle Cycling Campaign (2017k) *AGM2017: Our Network Workshop*. [online] (29 May 2017) Available at: http://newcycling.org/agm-2017-our-network-workshop/ [Accessed 17 May 2018].

Newcastle Cycling Campaign (2017l) *Newcastle - a working city?* [online] (26 February 2017) Available at: http://newcycling.org/newcastle-a-working-city/ [Accessed 10 June 2018].

Office for National Statistics (2011) *2001 Census aggregate data* (Edition: May 2011). UK Data Service. DOI: http://dx.doi.org/10.5257/census/aggregate-2001-2

Office for National Statistics; National Records of Scotland; Northern Ireland Statistics and Research Agency (2016) *2011 Census aggregate data*. UK Data Service (Edition: June 2016). DOI: http://dx.doi.org/10.5257/census/aggregate-2011-1

Office of Population Censuses and Surveys; General Register Office for Scotland; Registrar General for Northern Ireland (1997) *1991 Census aggregate data*. UK Data Service (Edition: 1997). DOI: http://dx.doi.org/10.5257/census/aggregate-1991-1

Office of Population Censuses and Surveys; Registrar General for Scotland (2000) *1981 Census aggregate data* (Edition: 2000). UK Data Service. DOI: http://dx.doi.org/10.5257/census/aggregate-1981-1

ONS (2018) *Final UK greenhouse gas emissions national statistics: 1990-2016* [online]. Available at: https://www.gov.uk/government/statistics/final-uk-greenhouse-gas-emissions-national-statistics-1990-2016 [Accessed 04 May 2018].

Oosterhuis, H. (2014) 'Bicycle research between bicycle policies and bicycle culture', *Mobility in History*, 5, pp. 20-36.

Opdenakker, R. (2006) 'Advantages and Disadvantages of Four Interview Techniques in Qualitative Research', *Forum: Qualitative Social Research*, 7(4).

O'Reilly, K. (2005) *Ethnographic methods*. London: Routledge.

Pantzar, M. and Shove, E. (2010) 'Temporal rhythms as outcomes of social practices', *Ethnologia Europaea*, 40(1), pp. 19-29.

Parsons, R. and Vigar, G. (2018) 'Resistance was futile!' Cycling's discourses of resistance to UK automobile modernism 1950–1970. *Planning Perspectives*, 33(2), pp. 163-183.

Pink, S. (2012) *Situating everyday life: practices and places*. London: SAGE.

Pooley, C.G., Jones, T., Tight, M., Horton, D., Scheldeman, G., Mullen, C., Jopson, A. and Strano, E. (2013) *Promoting walking and cycling New perspectives on sustainable travel*. Bristol: Policy Press.

Pooley, C., Tight, M., Jones, T., Horton, D., Scheldeman, G., Jopson, A., Mullen, C., Chrisholm, A., Strano, E. and Constantine, S. (2011) *Understanding walking and cycling: summary of key findings and recommendations* [pdf]. Available at: http://www.its.leeds.ac.uk/fileadmin/user_upload/UWCReportSept2011.pdf [Accessed 24 May 2014].

Prescott, A. (2008) 'The textuality of the archive', in Craven, L. (ed.) *What are archives? Cultural and theoretical perspectives: a reader*. Aldershot, Hants: Ashgate, pp. 129-142.

Pucher, J. and Buehler, R. (2008) Making cycling irresistible: Lessons from the Netherlands,

Denmark and Germany. *Transport Reviews: A Transnational Transdisciplinary Journal*, 28(4), pp.495-528.

Pucher, J. and R. Buehler (2009) Integrating bicycling and public transport in North America. *Journal of Public Transportation* 12(3), pp. 79-104.

Pucher, J. and Buehler, R. (2010) 'Walking and Cycling for Healthy Cities', *Built Environment*, 36(4), pp. 391-414.

Pucher, J., Dill, J. and S. Handy. (2010) 'Infrastructure, programs, and policies to increase bicycling: An international review', *Preventive Medicine*, 50 (0), pp. 106-125.

Pugalis, L., Swords, J., Jeffries, M. and Giddings, B. (2016) 'Toonsformation: skateboaders' renegotiation of city rights', in Davoudi, S. and Bell, D. (eds.) *Justice and Fairness in the City. A multi-disciplinary approach to 'ordinary' cities*. Bristol: Policy Press, pp. 125-148.

Punch, M. (1986) *The politics and ethics of fieldwork*. Beverly Hills: Sage Publications.

Reckwitz, A. (2002) 'Toward a Theory of Social Practices: A Development in Culturalist Theorizing', *European Journal of Social Theory*, 5(2), pp. 243-263.

Registrar General for England and Wales; General Register Office Scotland (2002) *1971 Census aggregate data*. UK Data Service. DOI: http://dx.doi.org/10.5257/census/aggregate-1971-1

Reid, C. (2017) *Bike Boom: The unexpected resurgence of cycling*. London: Island Press.

Røpke, I. (2009) 'Theories of practice — New inspiration for ecological economic studies on consumption', *Ecological Economics*, 68(10), pp. 2490-2497.

Roth, J.A. (1962) 'Comments on "Secret Observation"', *Social Problems*, 9(3), pp. 283-284.

Royston, S., Daly, M. and Foulds, C. (2014) 'Know-how, practices and sustainability', in Foulds, C. and Jensen, C.L. (eds.) *Practices, the Built Environment and Sustainability - A Thinking Note Collection*. Cambridge, Copenhagen, London: GSI, DIST, BSA CCSG.

Sagaris, L. (2014) 'Citizen Participation for sustainable transport: the case of "Living City" in Santiago, Chile (1997–2012)', *Journal of Transport Geography*, 41, pp. 74-83.

Schatzki, T.R. (2002) *The Site of the Social: A Philosophical Account of the Constitution of Social Life and Change*. University Park, PA: Pennsylvannia State University Press.

Schatzki, T.R. (2008) *Social practices: a Wittgensteinian approach to human activity and the social*. Cambridge: Cambridge University Press.

Schatzki, T.R. (2010) 'Materiality and Social Life', *Nature and Culture*, 5(2), pp. 123-49.

Schatzki, T.R. (2011) *Where the Action Is (On Large Social Phenomena Such as Sociotechnical Regimes)*. Available at: http://www.sprg.ac.uk/uploads/schatzki-wp1.pdf [Accessed 03 September 2019].

Schatzki, T.R. (2013) 'The Edge of Change: On the Emergence, Persistence, and Dissolution of practices', in Shove, E. and Spurling, N. (eds.) *Sustainable practice: social theory and climate change*. London: Routledge, pp. 31-46.

Schatzki, T.R. (2015) *Space of Practices and of Large Social Phenomena*. Available at: https://www.espacestemps.net/articles/spaces-of-practices-and-of-large-social-phenomena/ [Accessed 12 April 2017].

Schatzki, T.R., Knorr-Cetina, K. and Savigny, E.v. (2001) *The practice turn in contemporary theory*. New York: Routledge.

Scheepers, C., Wendel-Vos, G., den Broeder, J., van Kempen, E., van Wesemael, P. and Schuit, A. (2014) Shifting from car to active transport: A systematic review of the effectiveness of interventions, *Transportation Research Part A*, 70, pp.264-280.

Schensul, J.J. and LeCompte, M.D. (1999) *The ethnographer's toolkit*. (7 vols). London: SAGE.

Schwanen, T., Banister, D. and Anable, J. (2012) 'Rethinking habits and their role in behaviour change: the case of low-carbon mobility', *Journal of Transport Geography*, 24(0), pp. 522-532.

Seale, C. (2012) 'Sampling', in Seale, C. (ed.) *Researching society and culture*. 3rd edn. Thousand Oaks, CA: SAGE Publications, pp. 134-152.

Sheller, M. and Urry, J. (2000) 'The City and the Car', *International Journal of Urban and Regional Research*, 24(4), pp. 737-757.

Sherwin, H., Chatterjee, K. and Jain, J. (2014) 'An exploration of the importance of social influence in the decision to start bicycling in England', *Transportation Research Part A: Policy and Practice*, 68(0), pp. 32-45.

Shove, E. (2010a) *Submission to the House of Lords Science and Technology select committee call for evidence on behaviour change* [online]. Available at: http://www.lancaster.ac.uk/staff/shove/transitionsinpractice/papers/ShoveHouseofLords.pdf [Accessed 01 July 2015].

Shove, E. (2010b) 'Beyond the ABC: climate change policy and theories of social change', *Environment and Planning A*, 42(6), pp. 1273-1285.

Shove, E. (2012) 'The shadowy side of innovation: unmaking and sustainability', *Technology Analysis & Strategic Management*, 24(4), pp. 363-375.

Shove, E. (2017) 'Matters of Practice', in Hui, A., Schatzki, T.R. and Shove, E. (eds.) *The Nexus of Practices. Connections, constellations, practitioners*. Oxon: Routledge, pp. 155-168.

Shove, E. and Pantzar, M. (2005) 'Consumers, Producers and Practices: Understanding the invention and reinvention of Nordic walking', *Journal of Consumer Culture*, 5(1), pp. 43-64.

Shove, E. and Pantzar, M. (2006) 'Fossilization', in Lofgren, O. and Wilk, R. (eds.) *Off the edge: experiments in cultural analysis* Copenhagen: Museum Tusculanum Press, University of Copenhagen.

Shove, E., Pantzar, M. and Watson, M. (2012) *The dynamics of social practice: everyday life and how it changes*. London: SAGE.

Shove, E. and Walker, G. (2010) 'Governing transitions in the sustainability of everyday life', *Research Policy*, 39(4), pp. 471-476.

Shove, E. and Walker, G. (2014) 'What Is Energy For? Social Practice and Energy Demand', *Theory, Culture & Society*, 31(5), pp. 41-58.

Shove, E., Watson, M. and Spurling, N. (2015) 'Conceptualizing connections', *European Journal of Social Theory*, 18(3), pp. 274-287.

Skinner, D. and Rosen, P. (2007) 'Hell is other cyclists: rethinking transport and identity', in Horton, D., Rosen, P. and Cox, P. (eds.) *Cycling and society*. Aldershot, UK: Ashgate, pp. 83-96.

Smith, M.J. (2000) *Culture: reinventing the social sciences*. Buckingham: Open University Press.

Smith, A., Stirling, A. and Berkhout, F. (2005) 'The governance of sustainable socio-technical transitions', *Research Policy*, 34(10), pp. 1491-1510.

Soja, E.W. (2010) *Seeking spatial justice*. Minneapolis: University of Minnesota Press.

SPACE for Gosforth (2017) *About*. [online] Available at: http://spaceforgosforth.com/about/ [Accessed 30 November 2017].

Spinney, J. (2007) 'Cycling the city: non-place and the sensory construction of meaning in a mobile practice', in Rosen, P., Cox, P. and Horton, D. (eds.) *Cycling and society*. Aldershot: Ashgate, pp. 25-46.

Spinney, J. (2009) 'Cycling the City: Movement, Meaning and Method', *Geography Compass*, 3(2), pp. 817-835.

Spinney, J. (2010) 'Mobilising sustainability: partnership working between a pro-cycling NGO and local government in London (UK)', in Peters, M., Fudge, S. and Jackson, T. (eds.) *Low Carbon Communities: Imaginative Approaches to Combating Climate Change Locally*. GB: Edward Elgar, pp. 89-107.

Spotswood, F., Chatterton, T., Tapp, A. and Williams, D. (2015) 'Analysing cycling as a social practice: An empirical grounding for behaviour change', *Transportation Research Part F: Traffic Psychology and Behaviour*, 29(0), pp. 22-33.

Spurling, N. and Blue, S. (2014) 'Entities, performances and interventions', in Foulds, C. and Jensen, C.L. (eds.) *Practices, the Built Environment and Sustainability - A Thinking Note Collection.* Cambridge, Copenhagen, London: GSI, DIST, BSA CCSG.

Spurling, N. and McMeekin, A. (2015) 'Interventions in practices. Sustainable mobility policies in England', in Strengers, Y. and Maller, C. (eds.) *Social Practices, Intervention and Sustainability*. Abingdon: Routledge, pp. 63-77.

Spurling, N., McMeekin, A., Shove, E., Southerton, D. and Welch, D. (2013) *Interventions in Practice: Reframing policy approaches to consumer behaviour* [pdf]. Available at: http://www.sprg.ac.uk/uploads/sprg-report-sept-2013.pdf [Accessed 05 July 2015].

Stake, R.E. (1994) 'Case studies', in Denzin, N.K. and Lincoln, Y.S. (eds.) *Handbook of qualitative research*. Thousand Oaks: Sage Publications, pp. 236-247.

Strauss, A. (1987) *Qualitative analysis for social scientists*. Cambridge: Cambridge University Press.

Sustrans (n.d) *About the Cycling Network* [online]. Available at: https://www.sustrans.org.uk/ncn/map/national-cycle-network/about-network [Accessed 07 July 2016].

Taylor, C. (1971) 'Interpretation and the sciences of man', *The Review of Metaphysics*, 25(1), pp. 3-51.

The Cycle Hub. (n.d) *Homepage* [online]. Available at: https://www.thecyclehub.org/ [Accessed 07 July 2016].

The Journal (1997) Guide puts Cyclists on Right Track, *The Journal*, 26 September.

Tyne and Wear County Council (1984) *Cycling in Newcastle - The Opportunities*. [Presentation Report] Delivered at 'An Approach to Cycling' Seminar (09 March 1984).

Tyne and Wear County Council (1984) *Cycling in Newcastle - The Opportunities*. [Presentation Report] Delivered at 'An Approach to Cycling' Seminar (09 March 1984).

Tynebikes (1982) *Meeting of a small group of cyclists*. [Meeting] 30 November 1982.

Tynebikes (1983a) *Tynebikes News*. [Newsletter] Spring 1983, Issue number 1.

Tynebikes (1983b) *Cycling in Newcastle*. [Report] To the Policy Services Department of Newcastle City Council.

Tynebikes (1983c) *Cyclists Challenge City Planners*. [Letter] To Tynebikes Members, 11 November 1983.

Tynebikes (1983d) *Why are we so keen on cycling?* [Notes] Phone in programme, Radio Newcastle, 23 November 1983.

Tynebikes (1983e) *Newcastle upon Tyne City Centre Local Plan, Objections and Evidence Related to Cycling*. [Report] 14 October 1983.

Tynebikes (1983f) *Letter received from the Tyne and Wear County Council on cycling over Tyne Bridge*. [Personal communication] 22 June 1983.

Tynebikes (1983g) *Tynebikes News*. [Newsletter] Autumn 1983, Issue number 2.

Tynebikes (1983h) *Tynebikes Meeting*. [Meeting] 11 October 1983.

Tynebikes (1984a) *Tynebikes News*. [Newsletter] Winter 1984, Issue number 3.

Tynebikes (1984b) *Letter received from the National Federation of the Blind of the United Kingdom, Tyne and Wear branch on pavement cycling across the Tyne Bridge*. [Personal communication] 28 August 1984.

Tynebikes (1985a) *Tynebikes News*. [Newsletter] Autumn/Winter 1985, Issue number 8.

Tynebikes (1985b) *Tynebikes News*. [Newsletter] Spring/Summer 1985, Issue number 7.

Tynebikes (1987) *Tynebikes News*. [Newsletter] Summer 1987, Issue number 10.

Tynebikes (1988) *Tynebikes News*. [Newsletter] Issue number 12.

Tynebikes (1989a) *Tynebikes News*. [Newsletter] Winter 1989, Issue number 19.

Tynebikes (1989b) *Tynebikes News*. [Newsletter] Spring 1989, Issue number 16.

Tynebikes (1989c) *Tynebikes News*. [Newsletter] Summer 1989, Issue number 17.

Tynebikes (1989d) *Tynebikes News*. [Newsletter] Autumn 1989, Issue number 18.

Tynebikes (1990a) *Tynebikes News*. [Newsletter] Spring 1990, Issue number 20.

Tynebikes (1990b) *Tynebikes News*. [Newsletter] Summer 1990, Issue number 21.

Tynebikes (1990c) *Tynebikes News*. [Newsletter] Autumn 1990, Issue number 22.

Tynebikes (1991a) *Tynebikes News*. [Newsletter] Autumn 1991, Issue number 25.

Tynebikes (1991b) *Tynebikes News*. [Newsletter] Summer 1991, Issue number 24.

Tynebikes (1991c) *Tynebikes News*. [Newsletter] Spring 1991, Issue number 23.

Tynebikes (1992a) *Tynebikes News*. [Newsletter] Summer 1992, Issue number 27.

Tynebikes (1992b) *Tynebikes News*. [Newsletter] Spring 1992, Issue number 26.

Tynebikes (1993a) *Tynebikes News*. [Newsletter] Issue number 28.

Tynebikes (1993b) *Tynebikes News*. [Newsletter] Summer 1993, Issue number 29.

Tynebikes (1994) *Tynebikes News*. [Newsletter] March 1994, Issue number 32.

Tynebikes (1995) *Tynebikes News*. [Newsletter] December 1995, Issue number 33.

Tynebikes (1996a) *Tyne Biking*. [Newsletter] Summer 1996, Issue number 1.

Tynebikes (1996b) *Newcastle Map Development*. [Letter] From Cycle City Guides, 02 December 1996.

Tynebikes (1997a) *Tyne Biking*. [Newsletter] June-September 1997, Issue number 3.

Tynebikes (1997b) *Tyne Biking*. [Newsletter] January-March 1997, Issue number 2.

Tynebikes (1997c) *Tyneside Cycling Map*. [Map] Produced for Cycle City Guides by Ordnance Survey.

Tynebikes (n.d.a) *Tynebikes Pamphlet*. [Pamphlet].

Tynebikes and CTC (1995) *Submission to Transport Focus Group re. Cycling*. [Report] 12 October 1995.

Urry, J. (2004) 'The 'System' of Automobility', *Theory, Culture & Society*, 21(4-5), pp. 25-39.

Urry, J. (2015) 'Climate Change and Society', in Michie, J. and Cooper, C.L. (eds.) *Why the Social Sciences Matter*. London: Palgrave Macmillan, pp. 45-59.

Valentine, J. (2005) 'Tell me about... Using interviews as a research methodology', in Flowerdew, R. and Martin, D. (eds.) *Methods in human geography: a guide for students doing a research project*. 2nd edn. Harlow: Prentice Hall.

Van Den Hoonaard, W. (2003) 'Is anonymity an artefact in ethnographic research?', *Journal of Academic Ethics*, 1(2), pp. 141-151.

Verlinghieri, E. and Venturini, F. (2018) 'Exploring the right to mobility through the 2013 mobilizations in Rio de Janeiro', *Journal of Transport Geography*, 67, pp. 126-136.

Walsh, D. (2012) 'Doing Ethnography', in Seale, C. (ed.) *Researching society and culture*. 3rd edn. Thousand Oaks, CA: SAGE Publications.

Warde, A. (2005) 'Consumption and Theories of Practice', *Journal of Consumer Culture*, 5(2), pp. 131-153.

Watson, M. (2012) 'How theories of practice can inform transition to a decarbonised transport system', *Journal of Transport Geography*, 24, pp. 488-496.

Watson, M. (2017) Placing power in practice theory. In Hui, A., Schatzki, T. and Shove, E (Eds). *The Nexus of Practices. Connections, constellations, practitioners*. Oxon: Routledge, pp.169-182.

WCED (1987) *Report of the World Commission on Environment and Development: Our Common Future* [pdf]. Available at: http://www.un-documents.net/our-common-future.pdf [Accessed 04 May 2018].

Wellington, J. and Szczerbinski, M. (2007) *Research methods for the social sciences*. London: Continuum International Publishing Group.

Wenger, E. (1999) *Communities of practice: learning, meaning, and identity*. Cambridge: Cambridge University Press.

Whyte, W.F. (1991) *Participatory action research*. Newbury Park, Calif.: Sage Publications.

Wolcott, H.F. (1999) *Ethnography: a way of seeing*. Walnut Creek, CA: AltaMira Press.

Wood, P. (2010) 'Inhabiting infrastructure: how architectures, rhythms and crowds effect London's commuter cyclists ', *7th Cycling and Society Symposium*. Oxford, 6th September 2010. Available at: http://www.tsu.ox.ac.uk/events/100906/ [Accessed 06 May 2015].

Yang, Y., Wu, X., Zhou, P., Gou, Z. and Lu, Y. (2019) Towards a cycling-friendly city: An updated review of the associations between built environment and cycling behaviours (2007–2017), *Journal of Transport & Health*, 14, pp.1-42.

Yin, R.K. (2014) *Case study research: design and methods*. Fifth edition. edn. London: Sage Publications.

Appendices

Appendix 1

EVENT NUMBER	TITLE OF EVENT	VENUE	DATE	HELD BY
1	Newcastle Cycling Forum and Cycling Cities Ambition Fund Stakeholder Group Meeting	Civic Centre, Newcastle City Council	13/11/2014	Newcastle City Council
2	Newcastle Cycling Campaign Members Meeting	The Trent House	25/11/2014	Newcastle Cycling Campaign
3	Cycle Monitoring Task and Finish Group	Civic Centre, Newcastle City Council	04/12/2014	Newcastle City Council
4	Cycle Monitoring Task and Finish Group	Civic Centre, Newcastle City Council	15/01/2015	Newcastle City Council
5	Newcastle Cycling Forum and Cycling Cities Ambition Fund Stakeholder Group Meeting	Civic Centre, Newcastle City Council	22/01/2015	Newcastle City Council
6	Cycling Infrastructure Event	The Cycle Hub	03/02/2015	Newcycling Campaign & Sustrans
7	John Dobson Street Consultation Evening	Newcastle City Library	11/02/2015	Newcastle City Council
8	Cycle Monitoring Task and Finish Group	Civic Centre, Newcastle City Council	12/02/2015	Newcastle City Council
9	Newcastle Cycling Forum and Cycling Cities Ambition Fund Stakeholder Group Meeting	Civic Centre, Newcastle City Council	19/03/2015	Newcastle City Council
10	Newcastle Cycling Campaign Annual General Meeting	The Cycle Hub	24/03/2015	Newcastle Cycling Campaign
11	SCR3 - Great Park Infrastructure Safari Cycle Ride	Civic Centre, Newcastle City Council	02/05/2015	Newcastle Cycling Campaign
12	Campaign and Friends Meeting	The Cycle Hub	17/06/2015	Newcastle Cycling Campaign
13	SCR5 - Longbenton Infrastructure Safari Cycle Ride	Civic Centre, Newcastle City Council	04/07/2015	Newcastle Cycling Campaign
14	Newcastle Cycling Forum and Cycling Cities	Civic Centre, Newcastle	16/07/2015	Newcastle City Council

	Ambition Fund Stakeholder Group Meeting	City Council		
15	City Centre Infrastructure Safari Cycle Ride	Civic Centre, Newcastle City Council	05/09/2015	Newcastle Cycling Campaign
16	Newcastle Cycling Forum and Cycling Cities Ambition Fund Stakeholder Group Meeting	Civic Centre, Newcastle City Council	17/09/2015	Newcastle City Council
17	SPACE for Gosforth Meeting	Gosforth Pub	02/11/2015	SPACE for Gosforth
18	ESRC Festival - Academia and Advocacy Debate Day	Northumbria University	14/11/2015	Newcastle Cycling Campaign
19	Recyke Y'Bike Annual General Meeting	The Cycle Hub	18/11/2015	Recyke Y'Bike
20	Newcastle Cycling Forum and Cycling Cities Ambition Fund Stakeholder Group Meeting	Civic Centre, Newcastle City Council	19/11/2015	Newcastle City Council
21	The Cycle Hub, Observation	The Cycle Hub	11/01/2016	The Cycle Hub
22	The Roads weren't built for the Car, Carlton Reid	The Irish Social Club	13/01/2016	Skeptics in the Pub
23	Newcastle Cycling Forum and Cycling Cities Ambition Fund Stakeholder Group Meeting	Civic Centre, Newcastle City Council	21/01/2016	Newcastle City Council
24	The Journey, Observation	The Journey	28/01/2016	The Journey
25	The Cycle Hub, Observation	The Cycle Hub	03/02/2016	The Cycle Hub
26	The Cycle Hub, Observation	The Cycle Hub	07/02/2016	The Cycle Hub
27	The Cycle Hub, Observation	The Cycle Hub	01/03/2016	The Cycle Hub
28	The Journey, Observation	The Journey	04/03/2016	The Journey
29	Newcastle Cycling Forum and Cycling Cities Ambition Fund Stakeholder Group Meeting	Civic Centre, Newcastle City Council	17/03/2016	Newcastle City Council
30	Newcastle Cycling Campaign Annual General Meeting	Broadacre House, Newcastle	12/04/2016	Newcastle Cycling Campaign
31	Cycle with Armelle and Friends	Jesmond	16/04/2016	For Commonplace Jesmond
32	Newcastle Cycling Forum and Cycling Cities Ambition Fund Stakeholder Group Meeting	Civic Centre, Newcastle City Council	21/07/2016	Newcastle City Council
33	Future of West Gosforth 2035	Trinty Chruch, Gosforth	24/08/2016	Newcastle City Council
34	Newcastle Cycling Forum and Cycling Cities Ambition Fund Stakeholder Group Meeting	Civic Centre, Newcastle City Council	15/09/2016	Newcastle City Council

35	Recyke Y'Bike 10th Aniversary	The Journey	16/09/2016	Recyke Y'Bike
36	Blue House Working Group	Civic Centre, Newcastle City Council	19/09/2016	Newcastle City Council
37	Blue House Working Group	Civic Centre, Newcastle City Council	03/10/2016	Newcastle City Council
38	Graham Grant TORG series discussion	Cassie Building, Newcastle University	05/10/2016	Newcastle City Council
39	The Cycle Hub, Observation	The Cycle Hub	13/10/2016	The Cycle Hub
40	The Cycle Hub, Observation	The Cycle Hub	16/10/2016	The Cycle Hub
41	Monitoring and Evaluation Task and Finish Group	Civic Centre, Newcastle City Council	19/10/2016	Newcastle City Council
42	The Cycle Hub, Observation	The Cycle Hub	20/10/2016	The Cycle Hub
43	Blue House Working Group	Civic Centre, Newcastle City Council	31/10/2016	Newcastle City Council
44	The Cycle Hub, Observation	The Cycle Hub	03/11/2016	The Cycle Hub
45	The Cycle Hub, Observation	The Cycle Hub	11/11/2016	The Cycle Hub
46	Blue House Working Group	Civic Centre, Newcastle City Council	14/11/2016	Newcastle City Council
47	Newcastle Cycling Forum and Cycling Cities Ambition Fund Stakeholder Group Meeting	Civic Centre, Newcastle City Council	17/11/2016	Newcastle City Council
48	Making Walking and Cycling more Attractive to more People	Gosforth Trinity Church	23/11/2016	SPACE for Gosforth
49	The Cycle Hub, Observation	The Cycle Hub	24/11/2016	The Cycle Hub
50	Blue House Working Group	Civic Centre, Newcastle City Council	28/11/2016	Newcastle City Council
51	Blue House Working Group	Civic Centre, Newcastle City Council	12/12/2016	Newcastle City Council
52	SPACE for Gosforth Meeting	Gosforth Civic Theatre	06/02/2017	SPACE for Gosforth
53	Newcastle Cycling Forum and Cycling Cities Ambition Fund Stakeholder Group Meeting	Civic Centre, Newcastle City Council	18/05/2017	Newcastle City Council

54	The Cycle Hub, Observation	The Cycle Hub	19/06/2017	The Cycle Hub
55	Blue House Working Group	Civic Centre, Newcastle City Council	19/06/2017	Newcastle City Council
56	Newcastle Cycling Campaign, Kidical Mass	Jesmond to Newcastle, The Journey	01/07/2017	Newcastle Cycling Campaign
57	HSBC City Ride, Newcastle	Newcastle	02/07/2017	Newcastle City Council
58	The Cycle Hub, Monday Afternoon Ride	The Cycle Hub	03/07/2017	The Cycle Hub
59	The Cycle Hub, Monday Afternoon Ride	The Cycle Hub	10/07/2017	The Cycle Hub
60	The Journey, Cycle City Tours	The Journey	12/07/2017	The Journey
61	The Cycle Hub, Observation	The Cycle Hub	23/07/2017	The Cycle Hub
62	The Cycle Hub, Absolute Beginners Bike Ride	The Cycle Hub	24/07/2017	The Cycle Hub
63	The Cycle Hub, Monday Afternoon Ride	The Cycle Hub	24/07/2017	The Cycle Hub
64	The Cycle Hub, Saturday Social Ride	The Cycle Hub	29/07/2017	The Cycle Hub
65	The Cycle Hub, Absolute Beginners Bike Ride	The Cycle Hub	31/07/2017	The Cycle Hub
66	The Cycle Hub, Monday Afternoon Ride	The Cycle Hub	31/07/2017	The Cycle Hub
67	The Cycle Hub, Saturday Social Ride	The Cycle Hub	05/08/2017	The Cycle Hub
68	The Cycle Hub, Absolute Beginners Bike Ride	The Cycle Hub	07/08/2017	The Cycle Hub
69	The Cycle Hub, Monday Afternoon Ride	The Cycle Hub	07/08/2017	The Cycle Hub
70	The Cycle Hub, Saturday Social Ride	The Cycle Hub	09/09/2017	The Cycle Hub

Appendix 2

<u>Cycles of Opportunity, Information Sheet</u>

Purpose of the study.
'Cycles of Opportunity' attempts to understand the importance of cycling 'social sites' and their significance in promoting cycling in Newcastle-upon-Tyne. It is of interest to understand how these identifiable groups/organisations/businesses of cycling contribute to and develop cycling practice regardless of the local polity and physical network conditions.

What does the study involve?
This research project aims to engage with the wider cycling community across Newcastle. This includes attending events and activities hosted by various organisations, groups, and charities; whilst also visiting places which have a cycling interest. This aims to generate a broad understanding of cycling whilst also identifying key 'social sites' of cycling.

Why have you been asked to take part?
You have been asked because it has been identified that your knowledge and views of cycling in Newcastle are important to the development of the project.

Do you have to take part?
No, your participation is completely voluntary.

Will your participation in the study be kept confidential?
Yes, audio conversations recorded with participants are for transcription purposes only and will be anonymised to maintain confidentiality.

What will happen to the information you give?
The data will be kept confidential for the duration of the study and destroyed after they are no longer needed by the researcher.

What will happen to the results?
The project will be published as part of a PhD thesis and material may be published in subsequent research journals. The researcher will provide opportunities to view and discuss the subsequent research analysis before publication.

What are the possible disadvantages of taking part?
As the cycling community is relatively small, other people may assume you took part in this study because of your involvement with cycling in Newcastle. Furthermore, the information you share during the interview will reflect your perspective and experiences of the social community of cycling in Newcastle; therefore, some people may be able to identify you from your comments. Whilst there are no negative consequences envisioned for you in taking part, if there is a problem, please discuss this with myself (contact information below).

Any further queries.
If you need any further information, please contact Rorie Parsons at r.parsons@newcastle.ac.uk