

Edited by

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and

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CYCLING AND SOCIETY

To cycling futures

Edited by

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Contents

List	of Figures	vii
List of Tables		ix
Notes on Contributors		xi
Ack	Acknowledgements	
	oduction: Cycling and Society e Horton, Peter Cox and Paul Rosen	1
1	Cycling the City: Non-Place and the Sensory Construction of Meaning in a Mobile Practice <i>Justin Spinney</i>	25
2	Capitalising on Curiosity: Women's Professional Cycle Racing in the Late-Nineteenth Century <i>Clare S. Simpson</i>	47
3	Barriers to Cycling: An Exploration of Quantitative Analyses John Parkin, Tim Ryley and Tim Jones	67
4	Hell is Other Cyclists: Rethinking Transport and Identity David Skinner and Paul Rosen	83
5	The Flaneur on Wheels? Nicholas Oddy	97
6	Bicycles Don't Evolve: Velomobiles and the Modelling of Transport Technologies <i>Peter Cox with Frederick Van De Walle</i>	113
7	Fear of Cycling Dave Horton	133
8	Men, Women and the Bicycle: Gender and Social Geography of Cycling in the Late-Nineteenth Century <i>Phillip Gordon Mackintosh and Glen Norcliffe</i>	153

vi	Cycling and Society	
9	Bicycle Messengers: Image, Identity and Community Ben Fincham	179
Index		197

List of Figures

Figure 1.1	Riding the underpass	32
Figure 1.2	Making a place amidst automobilised space	36
Figure 1.3	Finding the gap at Hyde Park Corner	40
Figure 2.1	Woman in traditional dress advertising a 'male' Opel	60
Figure 6.1	Linear, evolutionary organisation of personal	
	transportation	121
Figure 6.2	Vehicle concepts in relation to one another	128
Figure 7.1 and 7.2	X-ray images used in the UK Department for	
	Transport's 'Cyclesense' helmet promotion	
	campaign, see www.cyclesense.net	141
Figure 8.1	Mr Bishop, Standard Bearer of the Montreal	
	Bicycle Club, 1885	159
Figure 8.2	Frances Willard mastering her bicycle, 'Gladys',	
	in a photo taken from her 1895 bestseller, A Wheel	
	within a Wheel: How I Learned to Ride the Bicycle	166
Figure 8.3	Ottawa, Ontario: 'Society' couples meet outside	
	Mr Mial's cottage in Aylmer, 1895	167
Figure 8.4	Winners at the bicycle gymkhana in Niagara,	
	Ontario, circa 1901	171

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List of Tables

Table 2.1	Some key nineteenth century female racing cyclists	49
Table 2.2	Partnership dynamics: three-way relationships between	
	racers, manufacturers and entrepreneurs	57
Table 3.1	Percentage of journeys to work by bicycle 1981, 1991 and 2001	69
Table 4.1	How cycle commuters see themselves and other road users	92
Table 6.1	Non-evolinear organisation of personal transport	126

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xii

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Introduction

Cycling and Society

Dave Horton, Peter Cox and Paul Rosen

What do most people think about cycling, if they think about it at all? Do they think about:

- the state of the roads, and how they would not dare ride, or let their children ride, on them;
- the Tour de France, an exhausting, drug-ravaged annual sporting event;
- an occasional day out in the countryside, if the weather is fine;
- an activity that is good for the planet;
- Olympic medals won through pedalling furiously around a steeply banked track;
- a sea of bicycles carrying people to work;
- adventurous once-in-a-lifetime sponsored rides for a charitable cause;
- a slowly rusting machine marooned somewhere at the back of the shed;
- a life-enhancing piece of equipment that means they no longer have to walk miles to carry out basic tasks;
- the hazard which cyclists present to other modes of mobility;
- occasional good intentions to get active, fit and healthy;
- nostalgia for a time now gone, 'when there weren't so many cars';
- despair at the continuation of such backward technology in our modern world;
- a simple, straightforward and sensible means of everyday mobility?

We are surrounded by cycling, and people seem to like talking about it, often from their own direct experiences. Many people have cycling anecdotes, stories, fears and theories. But cycling's universality is also one reason for its very complexity, diversity and, therefore, mystery. We live in societies in which bicycles and cycling are ubiquitous, yet from social science perspectives remarkably unthought. The origins of the bicycle as we know it today are contemporaneous with the emergence, in the latter part of the nineteenth century, of sociology as a discipline, but rarely has the academic glance been cast across at this hugely influential technology.

Although we often speak of cycling in the singular, there are many different kinds of cycling. The term 'cycling' tends to homogenise a remarkable plurality of lifeworlds, histories, structures and cultures, and a vast range of sometimes parallel and sometimes interwoven activities. This collection amply demonstrates cycling's diversity. In the pages which follow are to be found social scientific accounts of racing cycling (Simpson), utility and commuter cycling (Spinney; Parkin, Ryley

and Jones; Skinner and Rosen; Horton), leisure cycling (Mackintosh and Norcliffe), cycle messengers (Fincham) and unusual cycling technologies (Cox and Van De Walle). Other kinds of cycling include cycle touring, children's cycling and mountain biking. And of course, there is tremendous diversity even within each of these different cyclings. Thinking globally, how much variation must there be even in people's experiences of cycling as 'simply' a means of stitching together the different domains of everyday life? In the words of the French sociologist Pierre Bourdieu (1984, 209-11), 'it would be naïve to suppose that all practitioners of the same sport (or any other practice) confer the same meaning on their practice or even, strictly speaking, that they are practising the same practice'.

Cycling and Space

As a practice, cycling exists almost everywhere; it is global. Yet there are clear concentrations of cycling, at all spatial scales. In some places (and times) the practice of cycling is easier than in other places (and times). As the contributions which follow also demonstrate, different cycling practices are either encouraged or discouraged by variously favourable and unfavourable conditions (although precise identification of which particular conditions are acting to stimulate or to inhibit those different cycling practices is never simple; see Parkin, Ryley and Jones, this volume). Within any town, cyclists tend to favour some routes over others. Within a region, some towns are considered more cycle-friendly than others, which may nonetheless still be identified with cycles and cycling through, for example, association with long-established cycle races. At a national level, some countries have strong cycling cultures; others do not.

Let us look first at the level of the town or city. Here, specific places often excel at cycling. Around 40 per cent of journeys in Beijing, China, are made by bike.¹ Cycling accounts for over 30 per cent of all trips in Ferrara, Italy (European Commission 2000, 28). In the UK, the cities of Oxford and York are relatively 'velomobilised',² and in Cambridge, 27 per cent of all journeys are made by cycle

¹ Whilst we provide figures for cycling levels, because they are indicative of the relative state of cycling across time and space, we must also note how such figures often seem remarkably slippery and tend to vary according to source, albeit usually within a range sufficiently narrow for them to retain some degree of credibility. Our use of such figures in this introductory chapter should therefore be taken as suggestive rather than definitive (on the difficulties of measuring levels of cycling, see Parkin, Ryley and Jones, this volume).

² There is growing social scientific interest in all kinds of mobilities (Urry, 2000). Much recent work has recognised and explored the importance of the car, the practice of driving and systems of automobility to contemporary societies (Sheller and Urry, 2000; Miller, 2001; Featherstone, Thrift and Urry, 2004; Urry, 2004). We make use of the term 'velomobility' to signal the parallels and connections between our interests and those of researchers into 'automobility', but also to distinguish our specific concern for the materialities of cycling technologies, the practices of cycling, and the systems which constitute and are constituted by those materialities and practices.

(European Commission 2000, 27; Rogers and Power 2000, 121). About one-half of all journeys in some Dutch towns, such as Delft and Groningen, are made by cycle.

At the national scale, we have reasonably reliable and recent figures for the world's most economically rich societies. Here, the proportion of all trips made by cycle varies, from very low (regularly reported as below a few per cent in Australia, Canada, France, New Zealand, Spain, the UK and USA), to low (between 5 and 10 per cent in Austria, Finland and Germany), to moderate (above 10 per cent in Denmark, Sweden and Switzerland), to relatively high (around 26 per cent of all journeys in the Netherlands; see De La Fuente Layos 2005, 4).

Certain parts of the world are seen as especially good for cycling. Northern Europe is generally regarded as the world's most cycle-friendly region (and cycling advocates elsewhere strive constantly to learn from its experiences of promoting cycling, see for example Pucher and Dijkstra, 2003). The other main cycling region is Asia, and especially China. In contrast to northern Europe and Asia, the massively automobilised world regions of North America and Australia/New Zealand are often seen as especially hostile to cycling.

Cycling and Space/Time

Of course, levels of cycling change. So what are the important overall global trends in cycling? In a world in which more and more people are more and more mobile, the total amount of cycling is probably on the rise, but the proportion of all journeys made by bike is almost certainly in decline. Cycling in Britain has fallen from accounting for some 37 per cent of all journeys in 1949, to 1 per cent of all journeys today (Department for Transport, 2002), and two of the world's currently most velomobilised societies, China and India, appear to be following the same path, with the proportion of journeys made by cycle constituting an ever declining proportion of all journeys in these increasingly automobilised societies. We have seen that cycling accounts for some 40 per cent of journeys in Beijing, but a decade ago this figure was 60 per cent (Larsen 2002, 132; de Boom et al. 2001). In Beijing and also Shanghai, city authorities are taking action to ban cycles including increasingly popular electric bicycles from parts of the city . Across most of the world, cycling is often perceived to be getting in automobility's way, and is therefore to be discouraged (on, for example, cycling in Nicaragua, see Grengs, 2001). But in the near future we will almost certainly see many 'mobility battles' as massive pressures towards automobility continue to conflict with entrenched patterns of land use, behaviour and affordability. It certainly seems inconceivable that China, with currently around two cars for every hundred people, could ever attain levels of car ownership now found in the USA (some 78 cars per hundred people) (for more details about cycling in China, see de Boom et al. 2001; Smith 1995).

In terms of production, there are more cycles made and sold than ever before. Globally, the volume of cycles produced, owned and ridden vastly outnumbers cars (Huwer, 2000). In 2000, over 100 million cycles were produced globally, against

about 40 million cars (Larsen 2002, 129; Worldwatch Institute 2002, 17).³ Given the huge difference in affordability, most of the planet's people remain much more likely to move by pedal cycle than by motor car.

If in societies with few cars people are today being encouraged to drive, in societies with many cars people are increasingly encouraged to cycle. If Asia is the cycling region in decline, northern Europe is the cycling region on the rise. Where powerful interests in the economically least affluent societies tend to see cycling as archaic and aspire to the car (Newman 1999, 189; see also Cox and Van De Walle, this volume), the economically most affluent societies are starting to ride in the other direction. Towns and cities across the Netherlands, Denmark and Germany have achieved major increases in cycling over the last generation through active interventions in mobility planning. For example, the proportion of all journeys made by cycle in the Danish capital, Copenhagen, has grown dramatically over the past two or three decades, and is currently around one-third and rising. The town of Freiburg, Germany, has managed to double its cycling levels, to more than 20 per cent of all journeys, in a relatively short space of time (see Larsen 2002; Melia 2006/7; Newman 1999). In the UK, as in most high consumption societies, cycling is now routinely promoted in government policy; however, the only place in the UK to have achieved a recent substantial growth in cycling has been London, especially since the introduction of congestion charging in central London. Cycling doubled in central London between 2000 and 2005 (Transport for London, 2005), and in the City of London finance district cycling now accounts for over 10 per cent of journeys (www.citycyclists.org.uk, accessed 27/6/06).

Cycling and Time

Where, temporally-speaking, is cycling located? Is cycling of the past, the present or the future? The answer of course, is confused, and depends on where and who you are, as well as when. The bicycle has been in the past, and is perhaps still in some places today, understood as both a product and a carrier of modernity (Norcliffe, 2001; Oddy this volume). The bicycle can also be seen as belonging to the past and something to be left behind in the rush to greater mobility and affluence, a narrative challenged by Cox and Van De Walle in Chapter 6. But, as we have already mentioned, the most mobile and affluent societies today appear increasingly willing to re-embrace the bicycle. Furthermore, significant resistance to the pervasiveness of automobility is also beginning to emerge as a focus of grassroots 'alternative' development activity. In post-colonial societies where the urge to mimic the ultramodernity of former rulers is seen to lead to increasing levels of social and economic inequality, the cycle and the cycle-rickshaw are being reworked into symbols of a 'post-modern' resistance, a means of more efficient, egalitarian and sustainable urban mobility (Dubey, 2006). To reclaim 'the archaic' is directly to challenge the thrust of externally imposed, 'top-down' patterns of development. Moreover, cycling

³ However, we need to be careful about making any direct link between figures for cycle sales and actual use of those cycles. The USA has very low levels of cycling, yet 'with over 43 million cyclists [it] is the world's largest bicycle export market' (Larsen 2002, 129).

resonates with the themes of autonomy and self-sufficiency and with environmental, social and economic sustainability that are the hallmarks of alternative development models (for a classic formulation, see Illich, 1974). Indicating that declarations of the bicycle's obsolescence are premature, partnerships are now being forged between civil society organisations in the economically least affluent societies, and infrastructure planners and advocates in Europe and North America. For example, the 'Locomotives' partnership scheme of I-CE (Interface for Cycling Expertise) is now working in over 30 cities, sharing best practice and moving towards more cyclefriendly cities (www.i-ce.info). The sustainability agenda to which development planning is today subject suggests that the links between cycling promotion and poverty alleviation in development are now recognised and increasingly important to bodies such as the World Health Organization and World Bank, as indicated by their attendance at the major cycle planning conference, Velo Mondial 2006 in Cape Town, South Africa (www.velomondial2006.com). In the economically rich world, too, cycling-related projects have been found to promote social inclusion in areas of deprivation, from empowering young disenfranchised people through cycle maintenance training to integrating communities by establishing cycle delivery services on deprived housing estates (Elster, 2000).

Cycling certainly has a future as well as a present and a past. Nevertheless, in most of today's massively automobilised societies it is hard to imagine what the once velomobilised society was like, and what velomobilised societies elsewhere look, feel, sound, smell and taste like. Some people in these societies may have seen perhaps in a museum of transport black and white images of a time when cycling was a major mode of mobility, when bicycles 'crowded the racks outside factories and, at lunchtimes and the ends of shifts, sudden bell-ringing torrents of clothcapped workers came cycling out of factory gates' (McGurn 1999, 155). Cycling professionals and enthusiasts may make trips to centres of cycling excellence (usually, we have already noted, the Netherlands, but also sometimes China and elsewhere) in order to see what large-scale velomobility looks like, to learn how it is possible, and to fuel their cycle-friendly imaginations. But many of us have no direct experiences of such velomobilised societies. Yet it is of course only relatively recently that the bicycle was so important in our own societies. In Berlin in 1930, bicycle travel constituted 60 per cent of all trips, and as late as 1950 more than half of all trips there were still made by bike (Maddox 2001, 44-45). For many of us today such velomobility seems a world away.

Cycling and Society

So cycling is many things, varying according to both time and place. At the global level, it is in some places one answer to the problems of too much automobility, whilst in other places it is a mode of mobility to be banished in the pursuit of 'progress' and greater automobility; in others still it remains a mode of mobility beyond economic reach. Where some people are abandoning cars for bikes (at least for some journeys), others are abandoning bikes for cars (often for all journeys), whilst many are still struggling due to excessive cost and/or cultural prohibitions to cycle any journey

(Huwer, 2000; Rwebangira, 2001). Within Europe, in some societies cycling is simultaneously a national sport arousing great passions but a relatively uncommon practice (Italy, Spain, France), whilst in others it is a rather ordinary, and major, means of moving around (Denmark, the Netherlands, Sweden).

But even within a specific society at a particular time, there are of course major cycling inequalities. Both levels of cycling and attitudes to cycling tend to vary, often quite dramatically, according to gender, class, ethnicity and age. So, for example, in many societies cycling is understood and practised differently by men than by women (who may in some societies not cycle at all). In societies with globally high levels of cycling, as many women cycle as men. In societies with much lower cycling levels, such as the UK, men tend to cycle at least twice as much as women (Department for Transport, 2002, 1, 11; 2007; Stridwick, 2004).

The socially variable character of cycling can be confused, and confusing. For example, whilst cycling levels are typically assumed to be higher among people without access to cars, in the UK recent evidence suggests that car-owning households are more likely to generate cycling trips than households without cars (Parkin, Ryley and Jones, this volume). And the cycling societies of the Netherlands and Denmark also have very high levels of motorised vehicle ownership. If, in some places, cycling is understood as a practice of the poor, in others it is increasingly a practice of the rich. Similarly, cycling is typically understood as requiring physical and mental fitness; yet cycling is often adopted as a beneficial practice among those labelled as 'disabled' (Bartley, 2005). Indeed, one way of viewing the social landscape of mobility justice is that excessive automobility denies people the 'right' to cycle, with its many pleasures and benefits.

Pleasure appears to be one of the principal motivations for cycling, and one which remains remarkably durable across time and space. Although of course they are written by enthusiasts, the earliest accounts of cycling convey the thrill of people embracing a novel technology (for example, Ward 1896; Willard 1895), and many more recent accounts describe a kind of love affair with the bike and the cycling life (for example, Seaton, 2002; Hilton, 2005). We do not want to romanticise cycling, and certainly do not want to suggest that for vast numbers of people across time and space cycling was/is not primarily a necessity, and no doubt often a grim one. Indeed, talk of pleasure brings out an important and under-researched tension, between cycling as an enforced and as an elective practice; it is presumably much easier to enjoy cycling when it is chosen than when circumstances impel it.

But we do want to note how the more aesthetic dimensions of the cycling experience often seem at risk of 'capture' by the latest moral and/or political discourse, so that at any particular time and place people are instructed to cycle for some reasons more than others; because cycling is good for you, healthy, environmentally-friendly, combats pollution and congestion, and so on. We will see some of these 'framings' of cycling played out in the chapters which follow. Moral discourses (both official and unofficial) also speak of the benefits of cycling more generally. So cycling benefits individuals, but it also benefits organisations that do not have to spend as much on car parking (Skinner and Rosen, this volume), it benefits governments and health insurers whose healthcare bills can be reduced by having a fitter population

Introduction

(Hillman, 1993), it benefits the city through a kind of civilising process (Mackintosh and Norcliffe, this volume), and it benefits the planet (Horton, 2006).

Although it is not necessarily so (Oddy, this volume), the bicycle can be an object of conspicuous consumption (Mackintosh and Norcliffe, this volume). Even when the rise of specialised facilities and segregated paths is taken into account, cycling takes place in public space, subject to the public gaze. As all the chapters in this collection in their different ways attest, both the bicycle and the act of riding a bicycle unavoidably convey status. This status is never fixed, varying greatly according to time and place, and depending on attitudes held by both the rider and observers. Sometimes cycling conveys high status; sometimes it is stigmatised; sometimes it depends on what the person riding looks like, what they wear and the machine they ride. Even different groups of cyclists regard each other with widely variable attitudes, and build their own value-hierarchies (Cox, 2006). It is always important to think about cycling's status in seeking to understand unequal levels of cycling across different social groups.

The bicycle and cycling need always and everywhere to be understood in relation to the societies in which they exist. Many people cycle in China, but the cycle-tourist is an unusual sight. On a Sunday in Spain, many people can be seen cycling out from the towns and cities on expensive machines and clothed in specialist gear, but on a Monday morning the streets might be conspicuously absent of commuter cyclists. Conventional use of the bicycle reflects and reproduces social norms. But people also use cycles and cycling in new ways, and thus contribute to processes of social change. In this volume, for instance, we see how Victorian ladies (Mackintosh and Norcliffe), women racing cyclists at the end of the nineteenth century (Simpson) and today's bike messengers (Fincham) have all in different ways made their mark on society. Cycling is affected by, but also affects, wider society.

Historically, geographically, sociologically and culturally, cycling is a complex and diverse practice. Yet it is increasingly promoted by national governments across the rich world as a simple, straightforward mode of mobility with a variety of beneficial effects. Across Europe, governments demonstrate increasing commitment to cycling as a sustainable mode of mobility (European Conference of Ministers of Transport, 2004). The UK Government regards cycling as one appropriate response to a range of contemporary problems: congestion, pollution, climate change, (un)sustainability, quality-of-life, neighbourhood decline, health and disease (Department for Transport, 2004). We do not uncritically celebrate cycling technologies and practices, and we strongly believe in the need for more research into cycling, partly to improve our understandings of its potential limitations and possibilities with regards to policymaking; however, on the available evidence we also tend to agree that cycling is worth promoting, and with many of the reasons often cited for its promotion. We think of cycling as a practice epitomising the economist Manfred Max-Neef's concept of a 'multiple satisfier' (Max-Neef, 1990), able to help fulfil many valuable human needs simultaneously. But we also believe attempts to promote cycling could be much more effective if they incorporated greater understanding of cycling's complexity and diversity, even within a single society. We hope this collection is one contribution towards such greater understanding.

And despite some goodwill towards cycling, there is also much hostility. Whilst in some places cycling is increasingly constructed as a practice enabling 'sustainable development', in many places it seems mired in cultural, political and economic conditions which construct it as a practice impeding development, and thus to be discouraged. So the futures of cycling currently seem highly uncertain, perhaps impossible to predict, both locally and globally. How prominent a role might cycling play in tomorrow's societies? How much might this depend on where we live, and who we are? To what extent might cycling be shaped by wider forces, and to what extent might cycling contribute to shaping change? We hope that the chapters which follow will encourage reflection on such questions, and contribute to further consideration of the possible roles which cycling might play across time.

For now, we simply note how the tensions between the radically different prospects potentially inherent within cycling are even embodied in this book. On the one hand, the presence of this volume demonstrates rising interest in and commitment to the practice and potential of cycling. On the other hand, research with a focus on cycling remains a tiny drop in the ocean of research generally, even within the fields of transport studies and mobility studies (Rosen, 2003). Indeed, the lack of much analysis of cycling across the social sciences was part of the motivation for establishing the symposium on 'Cycling and the Social Sciences' that led to this book.

Cycling in the Academy

Although the literature is relatively sparse, this book is not the first to focus academic attention on cycling. Here, by way of a brief overview of the field, we divide previous work into four main areas.

First, cycling has perhaps been explored most comprehensively from historical perspectives (examples include Alderson, 1972; Tobin, 1974; Ritchie, 1975, 1996; McGurn, 1999; Lloyd-Jones and Lewis, 2000; Norcliffe, 2001; Simpson, 2001; Thompson, 2002; Herlihy, 2004). Indeed, historical interest in cycling spans enthusiast, amateur and academic historians, who gather for regular international cycling history conferences focused on topics including cycle technology and its manufacturers, cycle sport and cycling innovators. Three of this volume's chapters, those by Simpson, Oddy, and Mackintosh and Norcliffe, make valuable contributions to this existing body of cycling research. Second, and sometimes related to historical approaches to cycling, sociologists of sport have also taken an interest in cycling (Albert, 1991, 1999; Palmer, 2000; Wieting, 2000; Butryn and Masucci, 2003). Such studies obviously focus on the diverse world of cycle sport (which includes the more traditional sports of road racing, track racing, time-trialling and cyclo-cross, as well as more recent sporting developments such as triathlon and mountain biking). Third, attention to cycling has come from engineering, design and planning perspectives. The majority of studies in this area are specifically concerned with how to increase levels of cycling as a mode of urban transport (for example, Hudson, 1982; Tolley, 1990; McClintock, 1992; Ryley, 2001; McClintock, 2002; Cope et al., 2003; Horton and Salkeld, 2006). A distinct subgroup within the engineering literature is comprised

Introduction

of studies which focus on the specific design aspects of the bicycle itself, rather than the facilities around it (Burrows, 2004; Wilson and Papdopolous, 2004). Then, fourth, there is a range of medical approaches to cycling. These tend to focus on the positive health effects of cycling (British Medical Association, 1992; Hillman, 1993; Pucher and Dijkstra, 2003), as well as analysis of accident data, health promotion, and especially controversial issues such as the claims and counterclaims over the benefits of cycle helmets (for recent commentary on helmets, see Hewson, 2005; Hagel et al., 2006; Robinson, 2006, 2007; for an idea of just how much research this one issue generates, see the website of the Bicycle Helmet Research Foundation at cyclehelmets.org; last accessed 30/1/07).

Outside these four main areas, academic interest in cycling feels much more piecemeal and disjointed, with no strong sense of contributing to a wider stock of knowledge. But we must recognise attention to the bicycle and cycling from some sociologists of science and technology (Bijker, 1995; Rosen, 2002). We are also beginning to see an interest in the embodied experience of cycling from social and cultural geography (Horton and Spinney 2006; Jones, 2005; Spinney 2006; this volume). And finally, there is a broad and varied concern with the politics of the bicycle and cycling (Lowe, 1989; Blickstein and Hanson, 2001; Ferrell, 2001; Carlsson, 2002; Batterbury, 2003; Horton, 2006).

With its interdisciplinary breadth and ambition, we believe this book to be unlike any that has come before, and hopefully to herald a new dawn for studies of cycling. Our aim is for it to launch a committed, concerted intellectual push to figure the bicycle as a vehicle of the future as much as of the past, as about progress and development more than nostalgia. The book's life began at a symposium of social scientific research into cycling, hosted by the Centre for Mobilities Research at Lancaster University in June 2004, an event that has led to the establishment of a research network, the Cycling and Society Research Group (http://www.jiscmail. ac.uk/lists/cycling-and-society.html), and an ongoing series of symposia. The impetus for that first symposium was the mutual discovery of each other by a number of previously unconnected researchers of cycling and a resulting impatience to push cycling studies firmly onto, and up, the intellectual agenda. By providing a diverse range of social scientifically informed perspectives on cycling, we hope to open up fresh and timely intellectual spaces for consideration of cycling in particular, and 'sustainable mobilities' in general.

This collection brings together thinkers from different disciplines and different continents who share a research interest in cycling. Aside from their common focus on cycling, the chapters ahead are very diverse. But rather than seek to impose order on them, as editors we have consciously decided to throw them together rather haphazardly. Our rationale in doing so is a belief that we need to start thinking about cycling differently, in new ways. To contain cycling according to pre-existing conventions, so that for example, the history of cycling is seen as separate from empirically grounded accounts of contemporary cycling, would be merely to perpetuate one of the problems we are seeking to overcome. Although of course different readers will take different things from this book, and approach it in their own ways, we want to encourage rather than discourage unusual juxtapositions. We hope to inspire and tempt the reader to think differently about cycling, or should we say 'cyclings'?

As we have already indicated, the time is ripe for sustained scholarly interest in cycling. Cycling is profoundly relevant to a whole range of important contemporary debates, about how we move around and with what consequences, about the appropriate pace and scale of everyday life, about how we treat our bodies, our communities and our planet, about the very viability of human futures. There is a growing international impetus to assemble pro-cycling policies. In this context, we must be sure not to neglect, but to recognise and attend to, careful reflections and discussions on cycling and society.

The Chapters

Mobility is often treated as merely about moving from A to B. But movement is always more meaningful than such an approach to transport implies (Peters, 2005), and our experiences of movement demand greater analysis. Outside of literary accounts (for example, Kimmage, 1990; Krabbé, 2002; Woods, 2002; Humphreys, 2006), we do not know very much about how people bodily experience cycling. In the first chapter, Justin Spinney provides an innovative and fascinating analysis of urban cycling, in which he explores the embodied experiences of cyclists as they negotiate the streets of London. Representing his data as an ethnographic fiction, Spinney is able to illuminate a series of processes and events whose experiential dimensions are ill-served by abstracted rationalisation and conventional linguistic accounts. Perhaps the best parallel to Spinney's work is Paul Fournel's Besoin de Vélo (2001) in which the author writes simply in order to convey a sensual experience of what is known in France (and increasingly beyond) as 'sportive' riding. However, Spinney's account is rooted in the urban and has a very different flavour to those focused on cycling as a leisure or sporting pursuit. His fictive journey casts the reader into the kinaesthetics of the everyday, far from the romanticised mix of pain, passion and pleasure in narratives of racing endeavour (and a break from his own previous work exploring cyclists' experiences of riding the legendary Mt Ventoux in France, see Spinney 2006). What Spinney provides, then, is the kind of description and analysis of urban utility cycling that has been sorely lacking. His attention to the journey demonstrates how rich and full is the experience of cycling the city. He gives us much needed detail of the hitherto far-too-empty category of 'the urban utility cycling trip', and very usefully supplements the findings of the later chapter by Parkin, Ryley and Jones.

The emergence of the safety bicycle in the 1890s produced massive effects across industrialising societies such as the USA, France and Britain. The second half of the nineteenth century had already seen a major development in organised sports (Walvin, 1978, Chapter 7). New institutions, officials and publications formed part of this new sports infrastructure. James Walvin describes English society at the end of the nineteenth century as undergoing a 'leisure revolution' (Walvin, 1978). As a novel mobile technology, the bicycle quickly became the latest craze (Herlihy, 2004), 'a national obsession' (Walvin, 1978, 93). The new machine correspondingly

Introduction

entered into the dramas of a period characterised both by the rise of leisure (Veblen, 1899), and by women's push for new freedoms, including greater participation in the public sphere (Simpson, 2001). During this period the bicycle contributed to the commodification of leisure and entertainment, and cycling became a major spectator sport. The emergence of the Tour de France has been well documented (for example, Wheatcroft, 2003), but that event was not conceived until 1903. Before then, cycling was already well established as a hugely popular spectator sport.

Clare S. Simpson, in Chapter 2, provides a fascinating and unprecedented glimpse into women's cycle racing at the end of the nineteenth century. By going beneath the sensationalism that often accompanies representations of women's participation in professional and public sporting enterprises, she reveals the complexity of the social and economic relations that both enabled women's sport to exist but also confined it within a certain public imaginary. Just as the interwoven social structures of race and class shaped the career of the better known track racer Major Taylor during the same period (Ritchie, 1996), here both opportunities and constraints are shaped by the structures of gender and class.

The women's racing that Simpson highlights comes at a particularly interesting time. The tensions between cycling as primarily a participant or spectator sport, and the fragmentation of cycle sport into an array of categories (amateur, professional, road, track) has left a legacy that is still with us today. Intriguingly, cycling's 'identity crisis' (sport or pastime? elite or mass?) and the fragmentation of cycle sport occurs at the same moment of post-cycling boom that Nicholas Oddy, in Chapter 5, indicates as the start of the period of cycle history often disregarded by historians focused upon visible changes in the bicycle itself. The use of the bicycle in sporting endeavours of all sorts is further complicated by the regional and national favours and biases expressed by the various (self-)appointed governing bodies. In Britain, the National Cycle Union had resolved in 1888 to ban all competitive road racing. This set Britain on a separate course from other European nations, where cycle racing remained an enthusiastically supported spectacle on both track and road (Woodland 2005, 22). Indeed, in France, cycle racing regained ascendancy as a spectator sport subsequent to the banning of the Paris-Madrid motor race after its first stage in 1903, which left eight people dead and more than 20 injured, proved publicly unacceptable (Gaboriau 2003, 57). There is clearly much more to be learnt about this period.

Simpson's work alerts us to both the gendered nature of writing on cycling, and the way in which cycling itself is a gendered activity. The divergent forms of 'gentlemen's' and 'ladies' bicycle frames are reflected at childhood level by distinctly gender-segregated boys' and girls' bikes and accessories (see Oddy, 1990). The manner in which cycling is marketed as a gendered activity links to a number of later chapters, most obviously Mackintosh and Norcliffe's analysis of class and gender at the end of the nineteenth century. But we should also be alerted to the impact of gendered experience and expectations in understanding current attitudes towards cycling, and the effects of those attitudes on cycling behaviours and identities, an issue examined by Skinner and Rosen in Chapter 4.

Even within a single society, it is remarkably difficult to ascertain whether levels of cycling are going up, static, or going down, and among which groups and for what reasons. Furthermore, and especially in societies with low levels of cycling, the reasons

why someone does (or does not) cycle are often opaque. A complex combination of multiple factors either produces, or fails to produce, cycling behaviours. In recent years, the emergence of the complexity sciences as a way of understanding social processes has also made us more aware that social change is extremely tricky to affect in predictable ways (see Byrne, 1998; Urry, 2004). Nevertheless, many of us understandably want to know 'what works', what gets more 'bums on saddles'. And no matter how difficult the task of promoting cycling in a world full of unintended consequences (see Horton, this volume), pro-cycling policy ought to be based on the best available empirically-derived evidence of what is likely to be effective.

Here, we can set out and describe the various factors likely to be involved in decisions to cycle or not cycle, and provide some analysis of their relative, and changing, importance. These factors vary across scales; from the most general, cultural, level (government policies and institutional(ised) ideologies and attitudes, large-scale automobility, increasing distances, increased concerns with health and the environment), to the smaller scale (hills, weather, road conditions, cycling facilities, local and workplace cultures), and the biographical level (gender, stage of life course, economic wealth, personality type).

In Chapter 3, John Parkin, Tim Ryley and Tim Jones examine the UK context in such detail, in an effort to unravel what is going on, and they provide us with some very important findings. By taking a meta-analysis, Parkin, Ryley and Jones are able to identify factors that should be key policy drivers, but which are not necessarily taken into account by those tasked with the implementation of cycle planning measures. In a wider sense, their chapter highlights the growing recognition of the need to conjoin quantitative and qualitative approaches to data gathering and analysis. Too often in social science these have been considered as alien species, perhaps needing to coexist but always uneasily, even though the mutual suspicion evident even in the little cycling research that exists has been shown to be unfounded (Rosen, 2003). Parkin, Ryley and Jones demonstrate the value of finding appropriate ways to assess in terms translatable into policy measures those barriers to cycling previously seen as intangibles: quantitative measures of qualitative judgements.

In Chapter 4, David Skinner and Paul Rosen examine the ways in which employees of various organisations based around Cambridge, England, talk about themselves and others as more or less competent cyclists and motorists. The specific focus of the research which forms the basis of their chapter should be of great interest to cycle promotion practitioners, who generally regard the journey to work as particularly significant. Skinner and Rosen note the importance of a cycle-friendly organisational culture one which invites employees to cycle. But beyond this, their chapter represents a significant contribution to our understandings of issues to do with identity and representation. The empirical evidence Skinner and Rosen present makes plain that the identity 'cyclist' is not homogeneous, and that cycling workers can feel as alienated from the category 'cyclist' as much as, if not more than, the category 'motorist'. As such, their discussion bears on later chapters by both Horton and Fincham, which also focus on the behaviours and representations of cyclists.

Skinner and Rosen detail how people who cycle to work feel alienated by (their perceptions of) the behaviours and attitudes of other cyclists. It is perhaps illustrative of how homogeneous the category 'cyclist' has become when people who cycle

Introduction

themselves feel called upon to condemn and distance themselves from the behaviours of other people who cycle. Perhaps one moral of the tale is that there ought to be no inherent obligation or need for cyclists to identify with other cyclists; indeed, one sign of a healthy cycling culture might be that cyclists are so numerous and diverse that mutual identification is neither expected nor desired, and consequently, perhaps, the 'poor' cycling conduct of others does not feel like an accusation against oneself as a member of that cycling group.

Is 'cyclist' even the correct term for all bike riders? Certainly, the declared aims of Cycling England, the body that currently oversees government-financed cycle promotion in England, call for 'more people cycling, more safely, more often' (see http://www.cyclingengland.co.uk/); the term 'cyclist' is almost conspicuously absent from its promotional material. We think that more research into the complex issues surrounding cycling and identity would be very worthwhile. In the meantime, cycling promotion might well benefit from close examination of the attitudes and self-understandings of those who already use cycles as part of their regular transport regime, and reported both by Skinner and Rosen, and Spinney earlier on.

In a forceful demonstration of how cycling history does not end with the closing of the nineteenth century, Nicholas Oddy in Chapter 5 opens up the early decades of the twentieth century to pioneering sociohistorical analysis. Oddy explores the reasons behind the stability of the bicycle's appearance through the first third of the twentieth century. He takes this stability as something requiring explanation, given the bicycle's relative novelty and the reasonable expectation that technological developments and market competition among producers could have continued to produce changes in its form. Oddy argues that falling prices and mass uptake of the bicycle by the working class contributed, during this era, to a decline in the previously high status of the bicycle, and thus to a climate hostile to innovation in the cycling industry.

Both this and the following chapter by Peter Cox and Frederik Van De Walle are concerned in different ways with historiographical issues. The diachronic ordering of narratives has in-built expectations that change is the only factor worthy of historical analysis. Focused on the machine itself, this has led to intense analysis of those periods when a profusion of very visible changes are apparent, and an underexamination of the longer periods marked by stability of form. Hence bicycle history is largely artefactual rather than social, sometimes even when its concern is with the social construction of the technologies under scrutiny (Rosen, 2002).

It is very easy to see cycling as somehow preceding, and being replaced by, motoring. Among the affluent classes in the most advanced industrialised societies such as the United States, Britain and France, the emergence of the automobile at the end of the nineteenth century quickly began to eclipse and overtake the fascination with cycling. Whenever and wherever it is available, the car apparently overtakes the bicycle as a status-signalling object of consumption, and driving replaces cycling as an exclusive leisure practice. Moreover, it is certainly true that in many crucial respects the bicycle paved the way for a motorised age (Aronson, 1968; Hamer, 1987). The early cycle industry innovated interchangeability of parts, large-scale factory production and the integration and spatial organisation of supply chain relationships that later provided the grounding for mass assembly-line production in the car

industry – as well as providing early training for many of the key personnel who later established car manufacture (Hounshell, 1984; Norcliffe, 1997). The bicycle's popularity was instrumental in the development of infrastructures later utilised by the car – repair shops, street lighting and improved road surfaces (Oakley, 1977). The bicycle also contributed to changing conceptions of space and popular expectations of mobility (Norcliffe, 2001); it 'democratised' mobility by, for example, making 'the countryside' more accessible, and enabling travel across greater distances between various aspect of everyday life, especially work and home. Bicycles also democratised the idea and appeal of flexible, individual, private mobility (McGurn, 1999; Pooley et al., 2005).

Beyond being an intellectually flimsy idea, as evidenced by the body of work collected here, there is a danger in uncritically reproducing a story of the bicycle as being replaced by the motor car. Such a story implies that, once people leap enthusiastically into cars, bicycles are 'left behind' on the transport scrap heap, an anachronistic remnant of movements in mobility, the preserve of the nostalgic and those who cannot or will not fit. The bicycle and cycling then become rubbish. This conception of cycling as inevitably giving way to other modes of mobility is examined and critiqued by Cox and Van De Walle in Chapter 6. Given that the dominant 'evolinear' narrative of change in personalised transport technologies consigns cycling to the past, it ought to be challenged. After all, there is nothing inevitable about such a positioning. We need only think of indigenous minority languages, and their revival in many parts of the world (Hourigan, 2003), to realise the contingent and political character of things consigned to history, but which need not belong or stay only there. Cycling will always have (revisable) histories, but it also has (multiple) futures.

If Oddy's account demonstrates how historical conditions can encourage technological stability, Cox and Van De Walle nicely illuminate how the cycle is never a 'closed' technology. They explore and illustrate the velomobile as a cycling technology which confuses ordinary, taken for granted understandings of what 'a cycle' is and what it is for. Bringing together the apparently divergent perspectives of a social scientist working in community and development studies and a practical engineer, the authors emphasise the need to think beyond conventional meanings of what is a 'cycle', what is a 'car' and what lies in-between, by considering the relations between different types of transport possibilities. Their chapter considers not just how to reorganise and reorder the velomobile's place in currently dominant orderings of personal transport technologies, but also how to raise the status of all those alternative transport technologies currently marginalised by the hegemony of the conventional automobile; both are necessary if the social acceptability and uptake of currently marginal cycle technologies such as velomobiles are to grow.

Cox and Van De Walle demonstrate how thinking about barriers to cycling could be much broader and more complex than at present. Discussions of barriers to cycling typically concentrate on those issues examined by Parkin, Ryley and Jones in Chapter 3. When thinking about the reasons as to why people do not cycle, we tend to concentrate on hills, rain, fear of traffic and the long and complicated journeys which people nowadays seem to undertake. But Cox and Van De Walle make it clear that our very conceptions of different modes of mobility, and especially the static, apparently 'timeless' character of those conceptions, thwart innovation and development, the capacity to think and so also to move dif ferently.

In Chapter 7, Dave Horton identifies more barriers to cycling, this time located at the ideological, discursive level. Horton concentrates on the much-noted pervasive fear of cycling. But his approach to this fear of cycling is unusual. Instead of either dismissing such fear as resulting from false perceptions, or endorsing it as an accurate response to real conditions, he explores how such fear is routinely, banally constructed. Horton identifies three ways in which, he claims, cycling is constructed as dangerous through ironically enough attempts to render it safe: road safety education; campaigns to promote helmet use; and the growing provision of off-road cycle routes. He thinks we should be cautious about what goes under the label 'cycling promotion', because some of what currently passes for cycling promotion is actually more likely to be detrimental to cycling's prospects. At a more general level, Horton's analysis reminds anyone attempting to promote cycling that there is always the possibility for unintended consequences of their efforts; this is not a cue to do nothing, but to think and work better.

Horton also makes connections between the seemingly widespread and oft-noted fear of cycling and a much less commented upon fear of the cyclist. He wonders why, when cycling is apparently such a sane thing to do, so many people at least in the UK not only do not cycle, but also seem to feel discomforted or even antagonised by the cyclist's very presence. The popular press, in the UK in particular, seems to regard cyclists as a breed apart, regularly featuring articles expressing hostility towards a stereotypical urban cyclist (often labelled the 'lycra lout'). Horton argues that these mass media representations have the effect of 'othering' the cyclist, and so make it much more difficult for non/future cyclists to identify with the practice and the kind of person they imagine the cyclist to be; indeed, he argues that people will fear becoming such a figure. Like Ben Fincham in Chapter 9, Horton alerts us to the importance of representations of cycling to actual practices of cycling.

Themes of self-identity and social construction are also evident in the concerns of Phillip Mackintosh and Glen Norcliffe in Chapter 8, who attempt to unravel the complexities of cycling and gender at the end of the nineteenth century. Existing accounts of cycling in this period tend to emphasise cycling among women as symbolising opposition and resistance to patriarchy, as about the quest for women's emancipation (Holt 1989, 121-4; Simpson 2001). Such accounts note how women's use of the bicycle enabled progressive change in, for example, standards of dress, conduct and mobility. Mackintosh and Norcliffe challenge such accounts. They see women's cycling at the end of the nineteenth century as about conformity and containment rather than conflict and emancipation. For Mackintosh and Norcliffe, bourgeois North American women in the fin de siècle were striving to domesticate the public sphere to 'civilise' it according to conservative, Christian feminised values. So there is a feminisation of the city going on, but this proceeds not so much via overt political critique of women's marginality as via domestication of the public sphere by bringing feminine qualities to bear on it. Something which Mackintosh and Norcliffe's analysis importantly illuminates is how different groups often use the bicycle in an effort to achieve particular ends; their account of women in the past striving to domesticate the city by cycling certainly brings to mind both today's environmentalists attempting to 'green' the city via their use of bicycles (Horton, 2006), and contemporary anarchists seeking to subvert the city and its dominant automobilised rhythms through their cycle protests (Ferrell, 2001; Carlsson, 2002).

Mackintosh and Norcliffe, like Simpson in Chapter 2, recognise that cycle manufacturers had an interest in promoting cycling to women. Both Oddy in Chapter 5 and Cox and Van De Walle in Chapter 6 also demonstrate, in different ways, the importance of the production side to the worlds of the bicycle and cycling. Another clear economic dimension of cycling is its role in keeping people and goods on the move, a role which has barely been recognised in academic work (exceptions include studies of rickshaw economies in Dhaka; Gallagher, 1992 and Delhi; Ravi, 2006).

Across the world, cycles continue to provide vast numbers of people with a livelihood. In the UK, throughout the twentieth century, cycling technologies were used in a range of commercial tasks for example, in delivering groceries and letters. In Chapter 9, Ben Fincham provides us with an account of probably the best known and most notorious example of contemporary cycling workers, bike messengers. Fincham explores the meanings, motivations and moralities central to messengers and messenger culture. The strength of his account highlights a weakness of current cycling research: for all our interest in cycling and promoting cycling, we actually know very little about what motivates different kinds of cyclist. This seems a real gap in our current understandings of cycling; if we do not really know what enthuses existing cyclists to cycle and to keep cycling, how can we expect to tailor messages which appeal effectively to would-be cyclists? What makes people cycle? What enables different groups of people to ride bikes? Can we learn, through exploring the cultures of groups of people who do cycle, how better to encourage cycling among other groups of people who currently *do not* cycle? Such questions are worth contemplating as we move cycling studies into the future.

Fincham demonstrates how bike messengers are subject to multiple representations, which all converge on difference and deviance. As Fincham himself notes, the four-fold categorisation he develops to analyse different representations of messengers and their culture has wider applicability, and can be used to explore cycling more generally. Following Fincham, there are:

- 'positive-inside' representations of cycling the kinds of reasons 'insiders' give themselves for cycling and continuing to cycle;
- 'negative-inside' representations which lead some cyclists to campaign for improvements to cycling conditions, others presumably to give up cycling altogether if the negatives are too great for them, and cycling cultures in general to utilise them in the formation of strong cycling identities (on, for example, riders embracing the risks of racing cycling, see Albert, 1999);
- 'positive-outside' representations of cycling, which are what policy-makers and cycling promotion professionals tend to emphasise in their efforts to encourage cycling; and
- 'negative-outside' representations all the reasons people cite for why they do not and would not cycle.

Introduction

These different representations constitute the stories which individually and culturally we tell ourselves about cycling, and which exert powerful effects over what cycling is and could be, to us as individuals and collectively as societies. Such representations are therefore really important. Cycling simultaneously inhabits different worlds of representation; it is consequently contested, and revisable.

Returning to consideration of Fincham's chapter, the deviant cyclist in Mackintosh and Norcliffe's account of cycling a century ago is the irresponsible, speeding 'scorcher'. Today's deviant cyclist, similarly vilified by both 'respectable cyclists' (because, as Skinner and Rosen found, 'they give all cyclists a bad name') and society in general is Fincham's bike messenger. Concern with cyclists' behaviour

and particularly their propensity towards 'incivility' seems stable across time. But messengers seem to relish the maverick, outlaw connotations of their identity. Fincham notes how media representations of bike messengers and their work and lifestyle contribute to the 'othering' of messengers, and messengers utilise the deviant identities foisted upon them by media accounts to reproduce a distinctive, and valued, subculture. However, such media portrayals have a negative impact on cycling in general, because they tend to construct it as a risky practice pursued by risky people. As Horton argues, the risk of such representations is that cycling correspondingly becomes a practice which 'normal' people will be less likely to want to do.

Of course, we must note the intense and bitter irony of representations of cycling as an uncivil practice in an era of mass (some say 'murderous') automobility and deep (even 'pathological'?) acceptance (or 'repression'?) of automobility's many negative consequences. But overall, this book is not committed to chronicling and commiserating over the persecution, scapegoating, stigmatisation, harassment and discrimination of cyclists and cycling. To the contrary, its goal is to think cycling into bright, socially and ecologically liberated futures.

Cycling Futures and the Futures of Cycling Research

Urry (2004) believes we are moving towards a 'post-car' age, in which the steeland-petroleum car together with the current systems of automobility which sustain it will come to be seen as dinosaurs of mobility. So what role for cycling in the 'postcar' future? What will future cyclings look like? To what kind of lives and societies will those cyclings contribute? In some parts of the world many people have not yet climbed onto bicycles, much less into cars or planes. But elsewhere cycling is a generally local and localising practice. How prominent a part can it play in an increasingly global, increasingly mobile world? Perhaps the continuing emergence of information and communication technologies can contribute to the replacement of many longer-distance corporeal mobilities with virtual mobilities, and thus bring about a maintenance or return (depending on who and where you are) of bodily mobility to the local and everyday, the terrain on which cycling excels?

Certainly, cycling is currently tied up with a whole array of unfolding processes, whose unknown and highly contingent outcomes will contribute to tomorrow's mobile lives. Those processes we can reasonably predict to affect how people move around

in the future include, for example: oil prices; policy initiatives, such as road pricing; political and media framings of climate change, as well as climate change itself to whatever extent it occurs; the fortunes of critical discourses against accelerating automobilities in major emerging economies, especially China and India; the extent to which different information and communication technologies embed or change existing patterns of interaction and travel; cultural changes in attitudes and practices to do with the 'local' and 'global', the 'body', the 'environment' and speed. There is much we do not know. There is much that requires scientific research. And there is almost certainly an important place for cycling in sustainable global mobility futures, and for cycling research in understanding and positively contributing to those futures.

Together, the diverse chapters assembled in this collection stimulate many questions relevant to the futures of cycling, and thus also to the futures of our increasingly mobile societies. Cycling is very much part of society; it has contributed significantly to today's societies, and it continues to contribute to societies in-themaking. Cycling is present at the levels of both practice and representation, in the urban and the rural, in work and leisure, in the past, present and future. Our aim with this book is to contribute to thinking about how best to promote cycling futures, to provoke some new conversations, and to help develop an active agenda for social scientific research into cycling. Our hope is that it inspires more research into cycling, and in its own small way also contributes to a renaissance of cycling, a practice seemingly made for sustainability.

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Chapter 1

Cycling the City: Non-Place and the Sensory Construction of Meaning in a Mobile Practice

Justin Spinney

This chapter is born out of my own passion for cycling and the fact that I was lucky enough to receive funding to undertake a PhD studying cycling and mobility in London from 2003 to 2006.¹ The central research question of my thesis is *what makes people's movement meaningful to them*? Using a largely ethnographic approach this chapter begins to work through one particular strand that has emerged from my empirical fieldwork, relating to people's sensory experience of place in a mobile practice.

The concept of place as theorised in geographical enquiry has tended to revolve around notions of dwelling, sociality, and the visual qualities of place embodied in the term landscape. Consequently, the spaces of mobility have largely been theorised as relatively meaningless; as simply the line in between A and B. Such thinking has been extended by the social anthropologist Auge (1995), to characterise many contemporary spaces of mobility as 'non-places'; spaces where people do not meet, where they communicate only through signs and images, and where interactions are structured by rules not defined by the people in them (Auge 1995, 42–78).

My contention however is that when experienced in a different way, such nonplaces can actually be conceived of as place-like in character. Through the use of ethnographic and case study material, I explore the city by bike to illustrate key points of my argument. Taking a variety of different contexts, I work through sensory experiences of place in order to illustrate how meaning is created moment by moment through a series of fleeting and solitary embodied encounters. I also highlight the role of technology (in this case the bike) in manipulating such encounters.

¹ I would like to thank my supervisor Phil Crang for all his encouragement, support and comments; my adviser Rob Imrie for reminding me not to write too much like an academic; Catherine Nash for guiding me through my MA dissertation where all this started; the editors for their insightful comments on previous versions of this chapter; the ESRC for funding my PhD (award PTA-030-2003-00435); Helen for putting up with this fixation on cycling; and last but certainly not least all the case study participants who devoted their wisdom and time in helping me try and make sense of what cycling in London is all about. As always, any unconvincing interpretations remain my own.

Consequently I argue that destinations are not the only 'places'. I contend that meaning is created in the city's non-places through an embodied and sensory engagement with place which does not rely solely on notions of landscape, dwelling or sociality. Ultimately I want to suggest that meaning and consequently belonging are tied up with processes of enskillment dependent on learned strategies and available technologies. As Ingold suggests, 'A place owes its character to the experiences it affords to those who spend time there to the sights, sounds and indeed smells that constitute its specific ambience. And these in turn, depend on the kinds of activities in which its inhabitants engage' (Ingold 2000, 192).

Route Finding

Cities have long been seen as our greatest civilising influence, places of commerce, of belonging, of mixing. Cities, it has been said, are the cultural instrument through which societies attempt a more inclusive concept of humanity (LeGates and Stout 2000, 18). Mobility, according to Sheller and Urry (2000, 738), is as constitutive of modernity as urbanity. Yet the spaces of mobility that form a central part of city life have it seems become increasingly uncivilised for many.

In many nations, mobility is fundamental to the democratic rights of the citizen (Imrie, 2000, 1642), yet mobility is not equally enshrined for all as transport planners and operators make 'decisions about what kinds of travel are important and which journey purposes and destinations are to be favoured' (Whitelegg 1997 in Imrie, 2000, 1644). Unrestricted movement is discouraged in and by many of the new urban spaces (Edensor in Bell and Haddour 2000, 126). Indeed, current 'wisdom' based largely upon ideas of segregating mobility and the social² seeks to accommodate predictable and productive mobility rather than conceiving of mobility as a messy, unpredictable and dynamic reality (Imrie, 2000, 1644).

Largely devoted to the rapid movement of people and goods, many spaces of mobility seem only to serve origins and destinations; A and B so to speak. Traditionally, places have been constituted as homes and workplaces; places where social interaction takes place, places that have meaning. Indeed, as Cresswell (2006) points out, the line that connects A to B has traditionally been explained in terms of A and B and the push and pull factors relating to them (Cresswell 2006, 46). Movement seems to have been largely ignored as a social practice generative of meaning in itself.

Ingold (2000, 204) however, argues that there can be no paths without places and vice versa to constitute destinations and departures. Indeed, he argues that the destination can only be understood in terms of moving towards it, otherwise it is not a destination, merely an object. So how we think about destinations and departures constitutes the character of pathways. Yet in no small part thanks to modern planning

² The segregation principle was accelerated in Britain after the publication of Buchanan's 1963 report *Traffic in Towns*. This in turn was premised upon the ideas of engineers and planners such as Eugene Henard in the US and Holroyd Smith in the UK (Hamilton-Baillie and Jones 2005, 41).

and engineering bias,³ pathways have somehow been seen as spaces; transitional and transitory, rather than meaningful social places. Indeed, the word transitory speaks volumes about the values we apply to being in transit, as if this is a temporary state of being that does not constitute social life. Yet these places exist: they are real and people live their lives in and through them, increasingly so in ever more mobile societies. So what characterises the spaces of mobility? What makes these places manageable and meaningful?

Constructing Place and Non-Place

An enormous amount of attention has been paid to conceptualising meanings of place in cultural geography, and much work in the humanist vein has added greatly to our understanding of what constitutes a 'place' as such (Cosgrove, 1984; Cosgrove and Daniels, 1989; Duncan, 1990; Matless, 1990, 1995; Daniels, 1993; Nash, 1996; Cresswell 2003 to name but a few). Much less explicit research exists on notions of non-place. One notable exception however is the work of social anthropologist Marc Auge in his (1995) book 'Non-places: introduction to an anthropology of supermodernity'. I want to briefly discuss some of Auge's ideas and theories because I believe they provide a good starting point from which to interrogate the character of some spaces of mobility.

Auge's conception of non-place owes much to its opposition to place which according to Auge is characterised by direct communication, being lived in, defended, marked out and controlled by its inhabitants. Whilst there is not the space here to discuss every single aspect of place, I would like to draw attention to three key attributes of place which, as Auge's definition demonstrates, are dominant in western thinking: sociality, dwelling and landscape.

In contrast to situated notions of belonging and place as the products of fixity and locality (Urry 2000, 133), Auge categorises the spaces of the automobile as nonplaces; spaces where people do not meet, where they communicate only through signs and images, and where interactions are structured by rules not defined by the people in them (1995, 42 78). He goes on to ar gue that the real non-places the motorway, the airport lounge are produced by the fact that we come to know the places we pass as text only; that we hear of these places in the paper, or a sign on the motorway tells us about them, yet we never actually *experience* them (1995, 96). Indeed, Gandy claims that auto-spaces represent a new spatial configuration of society, technology and nature, and promote new forms of leisure and visual pleasure where nature increasingly becomes a panoramic experience: 'the tactile and olfactory senses subsumed by an emphasis on separation, movement, and visual power' (Gandy 2002, 122–3).

The crux of Auge's contention seems to me to revolve around how we construct place meanings. Auge's argument appears to suggest that because we only pass through these places, because we often experience them in private with no direct social interactions, and because they are experienced largely visually (and often

³ See for example Lyons (2003); Bannister (2004); Hamilton-Baillie and Jones (2005).

have little visual 'appeal'), then we do not find these spaces meaningful and hence they fail to become places. However, in line with Evans (2004, 2) I question whether 'experiences of fleetingness, temporality and ephemerality' must be meaningless. Whilst I have some sympathy for Auge's main points I believe his ideas provide the grounds for a fruitful debate I whole-heartedly agree with Evans when she states that Auge '... emphasises a particular experience of transit spaces, an experience that is in many ways desired by the agencies operating these spaces. In doing so, Auge only captures a small part of the travelling experience, and consequently neglects or marginalises a range of significant transit experiences and understandings' (ibid.). I suggest here that one of the primary reasons for this is that Auge, like numerous other theorists of place, neglects the multi-sensory nature of place by focusing largely on the visual and social to produce an account of the spaces of mobility perhaps more typical of dominant ways of experiencing these spaces (for example, in a car). Consequently, I pose the question, would experiences of these non-places be any different if they were experienced in a more embodied way ... by bicycle for example?

Place and the Senses

It is a somewhat hackneyed truism to suggest that we live in a visually dominated world and this bias extends into geographical enquiry (see for example Lynch, 1960; Stoddart 1967 in Cosgrove and Daniels, 1989). Consequently, and as many commentators have pointed out (Tuan, 1979; Cosgrove and Daniels, 1989, Jay, 1993, Rodaway 1994 to name but a few), vision has been seen as a means of objectification or at the least, as Ingold argues, has been enslaved to the service of objectification (2000, 253). However, Urry (2000) has suggested that despite the primacy of the visual, there are many spaces and practices which militate against solely visual experiences, where the other senses which cannot be so easily turned off form a large part of experience and a particular way of 'seeing'. Despite such assertions however, little sustained research has emerged which considers other sensory aspects of experience (notable exceptions include Buttimer, 1976; Tuan, 1979, Buttimer and Seamon, 1980, Seamon, 1993).

When we consider these extra dimensions to socio-spatial relations, the body asserts itself as being of paramount importance. As Rodaway suggests, 'the body is an essential part of sensuous experience: as a sense organ in itself, as the site of all the other sense organs and the brain, and our primary tool for movement and exploration of the environment' (1994, 26). Auge is not blind to this and points to a link between embodied experience and place arguing that, 'as anthropological places create the organically social, so non-places create solitary contractuality' (Auge 1995, 94). Yet I would suggest that Auge fails to account for the body as the site of multi-sensory potential. Places and non-places alike can be experienced bodily and directly and still fail to register on the perceptual radar. Whether they stand out or not, I suggest that each place or non-place depends upon a level of sensory (dis)engagement by the individual to make it so. Thus, simply being located somewhere is not in itself enough to make it meaningful. We must be sensorily disposed to perceive affordances in the environment to endow it with the characteristics of a place. As Tuan (1977,

18) argues, place only achieves 'concrete reality' when it is experienced fully, that is, 'through all the senses as well as with the active and reflective mind'.

People do not just 'sense' however, as Rodaway (1994, 22) affirms when he contends that 'perceptual sensitivity is learnt and forms part of our socialization into a cultural group ... Each sense is not only physically grounded but also its use is culturally defined'. Indeed, for Gibson (1966) perception can never be disinterested

what we see is inseparable from how we see, and how we see is a product of the activity in which we are engaged (Gibson in Ingold 2000, 260). Accordingly, the character of a place is dependent upon *how* we are in a place, and how we perceive and organise sensory input.

Yet it is not only the body that needs to be accounted for in most modern mobile practices; technology also plays a central role in defining the capabilities of the human body. Technology and the body continuously come together; machines come to assume a level of organicism, and bodies are increasingly redesigned using technology (Balsamo 1996, 3). Game (2001) elaborates, pointing out that 'the human body is not simply human. Through interconnectedness, through our participation in the life of the world, humans are always forever mixed' (Game 2001, 1). Consequently affordances, certainly for humans, are not simply between bodies and environments, they are mediated by other everyday entities and technologies. These reshape the affordances of an environment by allowing new possibilities for the body whilst closing down others (Michael 2000, 112). Whilst technologies are often considered simply as means to meet practical demands, the character of a place depends on 'how things are made' or experienced and is consequently determined by the technical realisation of a place (Norburg-Schulz, 1976). Ultimately then, our perceptions of our environment are informed by the goals, skills and technologies available to us.

On your Bike

Little work has been undertaken regarding the more performative and embodied aspects of everyday mobility⁴ and cycling in particular. My own cycling-related work has to date been focused more on the 'spectacular' world of road-racing (Spinney 2006) than the more 'mundane' everyday cycling of the city. In this chapter however and please for give the pun I would like to suggest the urban cyclist as a vehicle for exploring the creation of meaning in so-called non-places. As a practice cycling is embodied,⁵ sensorily open to the environment, technologically oriented, and also arguably escapes much of the disciplining that other forms of mobility are subjected to; it consequently lends itself well to the task in hand. That said, as a mode of transport which really does not 'belong' in many of the city's auto-spaces, it might logically be argued that even less meaning can be created out of such unforgiving

⁴ Notable exceptions include Miller (2001); Wylie (2002), Lorimer and Lund (2003), Jones (2005), Spinney (2006), and Cresswell (2006).

⁵ Of course, all of our activities are embodied, yet I suggest that the physicality of cycling makes it a particularly well-suited vehicle for the study of certain aspects of embodiment.

Cycling and Society

environments for the participants. On the contrary though, I suggest that by looking at these auto-spaces through the 'wrong lens', as it were, new meanings come into focus.

The rest of this chapter draws on empirical material from fieldwork with 20 cyclists in London.⁶ There is neither space nor the necessity to give a detailed break down of all case study participants. However, the project of researching and representing the 'unspeakable' does pose its problems, and I want briefly to discuss a few of these, in order to contextualise what follows.

One of the difficulties of researching often taken for granted embodied and sensory understandings is the lack of vocabulary available. As Pow points out, it is often difficult for people to express their experience of senses other than vision due to the limited vocabularies associated with non-visual dimensions (2000, 169). This is even more acutely felt when such embodied and fluid experiences are reduced to pen and ink. In order to communicate meaning, experiences must at some point be represented in one form or other, and the lack of vocabulary in sense-worlds makes this a difficult task. Compounding this problem, many sensations such as balance and touch are often fleeting and hidden moments of existence which do not lend themselves to expression or capture in the same way as the visual or aural.

One finding of my research is that the more intense a sensory encounter, the easier it is for participants to articulate their understandings of it. Consequently, whilst I could have focused on less intense experiences, this chapter focuses on quite sensorily-intense cycling encounters, in order to illuminate key points.

In order to better represent the unrepresentable and to keep some sense of the context in which the research was carried out, this chapter employs the strategy of an ethnographic fiction⁷ to take the reader through a variety of the city's spaces. One reason to use an ethnographic fiction is to keep the context of empirical material which so often gets lost in translation. In doing so I hope, as Norberg-Schulz (1976) suggests, to retain some of the character and atmosphere of place; the things that ultimately make it a place.

I also want to use the idea of narrative as a metaphor for the journey, in order to illustrate my contention that so-called transient spaces are also generative of meaning. This chapter, much like the experiences I talk about, would mean very little without the parts between the origin and destination, the introduction and conclusion. Consequently, this chapter stitches together empirical material from my case study interviews and ethnographic work to create a fictional journey (though one I have approximated many times in any number of permutations) around London, as a vehicle to represent some of the many sensory understandings of cyclists in London.

⁶ My sample included individuals from a mix of ethnic (though predominantly white), gender, age and socio-economic backgrounds. Participants also varied in riding background and experience including near-beginners, cycle instructors, couriers, long and short distance commuters, trials riders, bmx riders, road racers, touring cyclists and mountain bikers.

⁷ A fictional strategy of condensing geographically and temporally diverse data together to make conclusions more explicit and to highlight and frame specific themes (Sparkes 2002, 1).

This leads me onto one final but important point before I get on my bike, so to speak. Some might suggest that the experiences of a small number of London cyclists can not easily be generalised to other cyclists or indeed to other cities. In some ways I would not disagree with this contention. However, I would suggest that the arguments I make here, concerning cycling as a deeply sensual and embodied practice, do have a broader relevance which does bear generalisation. In truth I would suggest that the power of the accounts that I represent here is their ability to elicit the nature of people's knowledge-ability and their reasoning across a range of contexts. As Flyvbjerg (2001, 73) points out, 'universals cannot be found in the study of human affairs and therefore context dependent knowledge is more valuable than that of universals'.

Encountering the City

It's not a bad day weather-wise, but Wandsworth is as busy as ever with a constant and chaotic barrage of vehicles to negotiate with round the one-way system. Once round, I find myself in four lanes of fast moving rush-hour traffic approaching the Wandsworth Bridge roundabout, a busy intersection at the south side of Wandsworth Bridge where the 'motorway' of the A217 crosses over the A3205 which will carry me into central London.

As a fairly confident and experienced rider I'm not intimidated by the chaos, but today I still choose a slightly different and quieter route that I have learnt thanks to Karen. Karen lives in Clapham, is retired and in her fifties. She has increasingly used her bike to get around London in the last four or five years and regularly negotiates this busy intersection. However, on many occasions she chooses not to. She points out,

I don't like riding on fast red routes, I just don't find it pleasant. Because I'm not a commuter I'm not interested in the fastest route from a to b so I tend to choose the pleasant route, the scenic route ... (interview, 04/05/05). I don't particularly like the Wandsworth Bridge roundabout because I find the traffic whizzes round there really fast so that's why I tend to go under that one ... (interview, 09/05/05).

If the junction of Wandsworth roundabout itself exemplifies Auge's notion of non-place, so too does the underpass that Karen is speaking of. It is a semi-derelict and de-peopled landscape of rain-stained concrete, broken glass and feral weeds, not the sort of place you would imagine someone becoming attached to in any sense. As Karen herself notes, 'It's weird, it's a bit of *a* no-man's land and I often think it could be made a lot more ... at the moment it's a bit of *a* ... feels slightly dodgy sometimes I suppose' (interview, 09/05/05). Yet Karen often rides through the underpass. She goes on to say,

... sometimes there is some nice wildlife down there, and sometimes I pick wild flowers, I picked some really nice periwinkles the other day and a wonderful buddleia – I'm a bit into gardens – a gorgeous dark, deep purple buddleia which is really unusual. So I tend to, if I see something, just shove some of it in my basket! So that's why I go down there because there's lots of interest to me (interview, 09/05/05).



Figure 1.1 Riding the underpass

Cycling the City

Whilst I doubt anyone would argue that this underpass will become next year's London Eye for tourist numbers, I would suggest that Karen's account highlights the non-visual qualities of landscape. In contrast to the 'unpleasantness' of the roundabout with its sights, smells, noises and constant bodily confrontations, the scents, feel, colours and lack of confrontations give the underpass when participated in, rather than apprehended in a solely visual sense positive meanings not normally associated with such a de-peopled landscape.

In his seminal essay *The Practice of Everyday Life* (1984), Michel de Certeau attempts to locate practices that are foreign to the geographical space of visual, panoptic and theoretical constructions. Such practices refer to ways of operating, and to an opaque and 'blind' mobility characteristic of the bustling city (de Certeau 1984, 93). With Karen's account in mind I would argue that cycling could be positioned as such a practice, one that does not reject the visual but repositions it alongside the other senses to produce meanings from within the city rather than from a distance. Experienced from the alternative and embodied perspective of the bike rather than fleeting past in a car, this non-place becomes a place of relative interest and sanctuary.

I emerge from the underpass and attempt to ease myself back into the flow of traffic from the bus lane, glad to have avoided the sensory overload of the roundabout. As I'm doing so I'm struck by how much I rely on my hearing to let me know what is going on around me, and this reminds me of a conversation with another cyclist, Roger. Roger is in his forties and rides the 13 or so miles across London from Clapton to Norbury daily. He rides a touring bike into work and dabbles in occasional long distance road rides and touring holidays. When talking through the relationships between his senses on the ride to work, Roger points out that,

my vision is poor at the best of times but my hearing is very good ... I don't look round a lot, I listen a lot more than I look round. One of the most important bits I've found is actually when I'm in a bus lane at a traffic light and somebody is speeding up it to undertake. You're never going to see that because you're setting off so you just hear this car barrelling up; you know it's not in the lane next to you because you're seeing how slow they're going, and so that's when I know, okay, a car is going to come very, very close to me at this point; do not move out (interview, 3/11/04).

Such accounts demonstrate the importance of considering the environment in other than visual terms, pointing to the significance of other sense-scapes in making sense of place.

Roger goes on to point out how the experience of cycling relative to other forms of mobility can render places in to relative non-places. He describes making a journey by bus which he had hitherto made only by bicycle:

... at one point I had to get a bus to work along Streatham high street. I did not know any of the shops along there. I was going, 'oh look there's a Virgin there'. It was completely alien to me, anything beyond the kerb. You could have plonked me down in it and said 'where are you?', and I would have had no clue. I think it's an illustration of when I am zoning out, it's just going into my head rather than looking round ... I'm just not thinking about where I am (interview, 3/11/04).

Cycling and Society

Roger's account seems to point to a reversal of Auge's concept of non-place. The social space of the high street in Streatham, so full of people, interactions and visual signs when experienced visually from the confines of the bus, becomes irrelevant when experienced from the bike as the rider's attention becomes focused solely on what is important to negotiating the space. It takes a mode of transport productive of a less immediate encounter for vision to come to the fore, and for the place to be recognised in normative and visual terms. In contrast, on a bike the road becomes a place of sense where vision still has an important role, but where it no longer works in isolation from the other senses.

Roger's accounts illustrate the ways in which a sensory switching on or off characterises people's descriptions of places or relative 'non-places', indicating perhaps that knowing a place is not simply observing it, it is doing it; Roger is not thinking about where he is but *how* he is and what he's doing. As Ingold and Kurttila suggest, in any given environment, what a person does is grounded in '... an active, perceptual involvement *with* them, or in other words, that they watch and feel as they work' (2000, 193).

I lose myself on the run in through Battersea. I've done this so many times now I feel I know every pothole in the road. The only bit that really stands out is the extra effort I have to put in to get over the bridge coming past Battersea Dogs' Home. I sprint round Vauxhall Cross thankful that it's about as quiet as it gets and before I know it I'm grinding up over Waterloo Bridge. I take a right round the Aldwych and then left up the Kingsway. As my body again gets lost in the rhythms of pedalling, my mind wanders for a little while. I wake up as I approach the Southampton Row junction and start to filter through the traffic, weaving to and fro, hovering but never quite stopping. I become conscious that my awareness has narrowed to what is directly around me, and that the wider picture has temporarily dissolved.

This narrowing of the visual calls to mind a conversation I had with Joanne a 28-year-old cycle instructor about how she sees differently depending upon which bike she is riding:

yeah, my awareness on the white (Dutch style) bike is much better, I've got this incredible

and it feels like a meditative thing because I pay attention to everything carefully because I know I ... on my racing bike I know I can stop all of a sudden so I only pay attention to the more immediate things, like the traffic immediately affecting me instead of the slightly bigger picture. When I ride that white bike I ride very differently because I know that it doesn't have a good stopping distance. My visibility is much better on that bike because you're sat up like this and I've got a lovely view all around me whereas on my racing bike you almost have to look under your arm pit, you don't have brilliant visibility. On my racing bike I ride faster and I take more risks because it stops so well and it's so narrow I can filter, whereas on the white bike I can't filter so on that I'm much more likely to wait my go at the junction than go to the front (interview, 17/08/05).

Whilst the previous accounts have illuminated the importance of the other senses alongside the visual, here Joanne points to a difference in how she sees and hears, in

Cycling the City

how she experiences her environment, dependent upon the capabilities of the bike she chooses to ride. By suggesting that her sensory worlds become relatively larger or smaller depending upon the capabilities of the bike, she points to the ways in which different technologies open up different experiences of the 'same' landscape. Of course, it would be entirely possible to ride the Dutch-style bike in a 'headsdown-full-speed-ahead' kind of way, but the point is that riders are less inclined to do this because the crystallised design of the bike⁸ orients the rider to the world differently, and in a profoundly embodied way. Vision and hearing react to the body's position in space because of different geometry, and the muscles of the body react to the increased resistance of the tyres, weight and steering of the bike, effectively constraining the possibilities for the rider.

Whilst Joanne makes little specific reference to the qualities of the place she is travelling through, her comments suggest that the 'place' she is in on the white Dutch-style bike is a somewhat different one to the 'place' she is in on her racing bike. The sensory experience of the white Dutch-style bike is characterised as a relatively visual and sedate one, whereas the racing bike opens up a kinaesthetic world of greater speed, exhilaration and reduced visibility. Technology is thus shown to structure movement, sensory experience, and hence ultimately the possible meanings of a particular place.

It's mid afternoon now and I head out of the city through Holborn and weave my way towards the A13. The city seems to become less colourful as I leave Whitechapel and Stepney behind, giving way to the grey concrete of the A13 proper. I soon forget about this however: devoid of people it becomes for me a place of sensory overload where the trucks pass too close and too fast, where I'm always looking, listening, feeling, and working as hard as I can to get through it as soon as possible. I can't help but feel a little smug that I don't have to ride down here as often as Alan.

Alan is 26 and has been riding in London for three years. He commutes the eight miles in from Beckton to Farringdon everyday along the A13 on a single speed bike.⁹ When asked about one of the potentially monotonous stretches home along the A13 and the turn of speed that he exhibits up over one of the bridges, Alan replies that,

... It's up hill. There's quite a long straight boring bit just before this, before the two sets of lights. It's bus lane, it's straight, it's flat, it's pretty boring, and I don't know, you kind of get to there and there's a bit of difference in the pedals. This is a conscious effort to make it a bit more interesting. I always just bang it up there (interview, 21/10/04).

The first point I want to highlight in Alan's account is the way in which he uses architectural and visual imagery to conceptualise the A13 as a non-place, describing it as 'long, straight, flat and boring'. He then goes on to describe how he relieves this visual boredom by manipulating the kinaesthetic sensations of muscular effort within his own body in conjunction with the changing topography of the A13. Much as previous accounts have talked of a reduction in the visual content of place, Alan

⁸ See for example Pinch and Bijker (1984); Michael (2000); Rosen (2002).

⁹ Single speed bikes as the name suggests have only one gear. They have gained popularity in London in recent years, no doubt partly because of their favoured use by many bike messengers.



Figure 1.2 Making a place amidst automobilised space

talks here about a kinaesthetic content of place. Thus, whilst the part of the A13 that Alan talks about may have the visual and social qualities of a non-place by Auge's reckoning, from Alan's account a more nuanced understanding of it as a place emerges. Even in solitary and transient engagement with an unsympathetic landscape, Alan creates meaning by manipulating the sensations within his own body. Whilst speed has traditionally been considered contrary to the integrity of place (Curtis in Borden et al 2002, 59), in this instance I contend that, for the bicycle rider, speed is productive of the meaning of place because to produce it requires muscular effort from the body.

Having completed my errand in Beckton I double back into central London through the city and south over Blackfriars Bridge. I choose not to follow the main artery along the south side of the Thames primarily because I know from bitter experience that the section of tarmac between London Bridge and Waterloo Bridge heading west is so lumpy it makes your head spin. As Rodaway suggests, technologies such as the bike can afford 'extended touch' (1994, 55), transforming the noise of the tyres and the feel of the road through the frame of the bike to give an impression of the micro-geography of the terrain. Consequently, as Wentworth (in Borden et al. 2002, 388) suggests, our habits of movement are very telling, they contain preferred routes, but ones which may be altered at a whim, or by a change in the material fabric of the city. So instead I cross over the bridge at the pedestrian lights and get onto the much slower (but smoother) road that runs between the main road and the river. Within a minute's easy pedalling I'm rolling past the Shell Centre on my left and the London Eye on my right.

I swing left and then right through the lights and back onto the main road. Coming into the Imax roundabout at the foot of Waterloo Bridge I pick up speed as I clock the gap that's about to happen in the oncoming traffic. I shoot out onto the roundabout and enjoy the intensely rewarding feeling of circuiting the perfect curve of the roundabout at over 20 mph. I head on past the old GLC building and St Thomas's Hospital. It's rush hour now so I prepare myself mentally as I approach Vauxhall Cross: this six-lane motorway of a junction takes a certain amount of experience to navigate comfortably. With its high volumes of seemingly endless traffic, Vauxhall Cross dominates the surrounding area and is notable for its sprawling size and the high level of discipline¹⁰ that it imposes on its temporary inhabitants.

As I wait at the lights I start to think about all the conversations I've had with Gary and Zara about navigating this (non) place. Gary is 26 and works in Farringdon. He has been commuting the five miles in to work everyday on a single speed mountain bike for just over two years. Zara is 25 and works near Kings Cross. She has been commuting the six miles everyday to work on an old, ladies Raleigh racing-style bike for just over a year. They live together and are both keen mountain bikers in their spare time.

Whilst Gary and Zara ride past many more 'memorable' places on the way to and from work (including the London Eye and Big Ben), when asked which parts of their journey stand out for them, they both identify Vauxhall Cross as one of the most

¹⁰ Including but not limited to road traffic laws, lane markings, signage and traffic lights.

Cycling and Society

'memorable' parts of their daily commute. Whilst the sights of London do of course register with Gary and Zara, negotiating Vauxhall Cross is an everyday occurrence for them both, and their accounts of it immediately recall it on an embodied level, as Zara suggests:

I think it (Vauxhall Cross) just feels ... because like there you're going onto the road and there's all these cars coming from different angles, and I guess because there's so many lanes you've got to cut across a few of them to keep going straight ahead. And just 'cos you're going that way and the cars are going that way and it's just not very nice. It doesn't feel nice, it's one of those things where you just feel that there's too high a chance of something going wrong, if that makes sense (interview, 01/11/04).

Zara's account attests to the 'overload' of sensory information that such a place can produce, where the senses of sight, sound, feel and balance are all bombarded with information. Gary agrees: 'the bit that stand outs would be Vauxhall because you can't just cycle down the bus lane, you have to get out into the middle of the traffic so you have to think about it' (interview, 26/10/04).

Both Gary and Zara speak about Vauxhall Cross in decidedly non-visual language, instead focusing on its chaotic feel, as a place experienced bodily. However, whilst Gary and Zara have similar opinions of Vauxhall Cross as a (non) place, they relate different ways of dealing with its sensory overload. Talking further about her experience of Vauxhall, Zara says that, '... when I'm in the bits of traffic I go very slowly through it all trying to feel safe ... So maybe it is taking a different strategy, maybe I'm not as good at going quite so fast, and I get through it fairly slowly ...' (interview, 01/11/04). Zara's account suggests that she tries to slow the situation down by going slowly herself, in effect attempting to reduce the amount of sensory information she is being bombarded with.

In contrast, Gary prefers to minimise the speed of the traffic relative to himself by going as fast as possible. It becomes clear why when he recounts his own experience of having to go slowly round Vauxhall Cross:

I've ridden the single speed when it's been set up for off-road into work and that's just horrible because it's so slow with the off-road tyres and the off-road gear. I can see why lots of people don't cycle to work or cycle round London when I'm riding that because it's more the speed of a regular person on a regular bike and it's horrible. It's just really nasty and I really hate it because the cars are just flying past you especially when you go into Vauxhall and you have to get into that middle lane (interview, 26/10/04).

Gary's account attests to the way in which he experiences the speed and intensity of place at a bodily level, and again highlights the importance of technology in shaping the experience of a particular place as either good or bad. Whilst Gary and Zara have only a fleeting encounter with Vauxhall Cross every day, their encounters within it are so intense and multi-sensory as to render it a memorable (if not altogether positive) site of interactions. As Massey points out, our relationships to space are constituted by embodied practices, and this includes much more than the visual; 'spatialities are constructed as well by sound, touch and smell by senses other than vision alone' (2002, 463). Moreover, the contrasting strategies of Gary and Zara for dealing with such encounters point to the ways in which people with different skill levels adopt different strategies for negotiating the same space, a point which I elaborate upon in my final account.

I get round Vauxhall Cross without mishap. I know the junction well; which lane I need to be in and in which order the traffic moves off, but that doesn't always help with six lanes of traffic coming in from all directions! I'm well on my way home now, but then a friend phones, asking me to meet him back in central London in two hours. I decide I can't be bothered to go home and head back up over Chelsea Bridge towards Knightsbridge and the West End. After rounding Sloane Square I opt to miss out the Cromwell Road. Instead I cross Belgrave Square and hit Hyde Park Corner from the west side just above the Grosvenor Place entrance. Racing across the chaos of Hyde Park Corner I turn left off Picadilly and make it into the relative quiet of the series of lanes and squares on its north side.

As I catch my breath I spot Nate, one of the many hundreds of bike messengers who work in London. Nate is 27 and has been messengering in London full time for three years. When I catch up to him he's heading back to the Palladium steps to wait for another job so I ride with him. We chat as we ride slowly and I mention my high speed sprint across Hyde Park Corner; Nate laughs and comments,

Yeah, that's one of the great exciting things about places like that, you have to be super alert because everything is coming at you from all directions, and you're working on those gaps and you shoot through it and it disappears. You're working within ... you know that the gaps are going, it's like watching a wave break or something; it's going to be there for that amount of time (snaps fingers) and it's gone and it'll never be there again. And Hyde Park Corner or any of the big complexes really excite and I like that. Berkeley Square is another one. You 'switch on' to Berkeley Square as soon as there's a gap ... those moments when you know it's all happening, they're really exciting because all your sensory hairs stand up, you're listening and you're looking ... it's all crucial (interview, 15/11/05).

Nate's account, which focuses on the exhilaration of being hyper-alert, points to an understanding of many of the city's spaces of mobility as sensorily rich. It also becomes apparent from talking to Nate that the enjoyment he gets from riding in such intense spaces is something that has grown over the years that he has been a bike messenger. Indeed, as Ingold (2000) suggests, cycling, like all forms of mobility, is a learnt activity, dependent upon the presence of teachers and a suitable environment. The skills needed to cycle are therefore in more limited supply than, say, those required for someone to walk (Ingold 2000, 375). It follows then, that as terrain becomes less suitable and teachers become fewer, the potential for cycling is diminished, and the activity itself becomes harder to learn. This becomes evident in situations such as the one just described by Nate, where not everybody has the skills - in this case speed and bike handling - to feel comfortable in a particular place. The ability of a rider to manipulate their environment is thus dictated by the skills and technology that they have at their disposal, both of which are culturally framed. In the case of the messenger community this cultural framing is very strong, with bike handling skills, attention to bicycle technology and a perceived recklessness (among

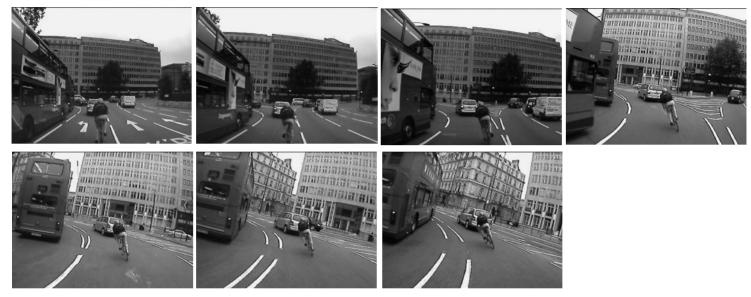


Figure 1.3 Finding the gap at Hyde Park Corner

other things) being sources of significant cultural capital (see Fincham, this volume, for more on the subculture of bike messengers).

In this instance, the meanings which places like Hyde Park Corner hold for Nate are sensory in nature but ultimately derived from a particular technological and cultural orientation to it, which allow it to be seen as a place. In contrast to Gary and particularly Zara in the previous account, the sensory overload of such places is interpreted positively, due to the particular framing of cycling dominant within the subculture of bike messengering.

As Nate points out however, there is a limit to the amount of sensory input the body can handle:

Yeah, you can feel exhausted! Some days you come away and your head is just spinning. Like today for instance, or if you have a forty job day and you're just on it for the whole time, by the end of it you are knackered. Your eyes just feel tired from constant searching and switching and refocusing every second. Most people are just like 'oh, I'll look there and maybe there'. But all the time, looking, listening, filtering noise. I've got this box here that just blurts out at you and you just don't hear it until it goes '1218'. And instantly your ears focus on that. I get woken up by it (interview, 15/11/05).

Come to think of it I'm feeling a bit like that now, so I leave Nate at the steps and head down Marlborough Street and then right onto Berwick Street. I lock my bike up outside *Flat White* and heave myself into an armchair to enjoy a well deserved coffee.

Are we there Yet?

Sitting back in my comfy chair looking at my computer screen, what does all this demonstrate? Removed from the act of doing and the active practice of the landscape, riding round London seems a long way away all of a sudden, and this is perhaps just one point amongst otherws that I have tried to illustrate in this chapter.

Firstly, I have attempted to illustrate that in an embodied practice such as cycling, notions of place are less reliant on the visual. Vision is shown to be re-embodied alongside the other senses as part of a multi-sensory construction of the experiences and meanings of place. It is perhaps not that the role of the visual is reduced so much as the role of the other senses is brought more to the fore.

Secondly, I have attempted to highlight the importance of technology in this case the bike in defining *how* we are in a place and consequently the potential meanings of place.

Thirdly, I have also demonstrated some of the ways in which riders are able to control their experience of place by manipulating the sensations within their own bodies. Much like the personal stereo¹¹ when used to manipulate the experience of place, I have shown how some riders consciously manipulate the kinaesthetic sensations in their own bodies to produce new meanings of space.

¹¹ For a good discussion on personal stereo use and auditory culture see Bull (2000).

Cycling and Society

Fourthly, I have briefly explored the importance of culture in defining the role of the senses. The very nature of cycling as an embodied practice emphasises a multisensory understanding of place, yet some cultures attach more meaning to some sensations than others.

Finally, and bringing these points together, I question the definition of non-place as outlined by Auge (1995). If meaning is shown to be generated through senses other than the visual, and if sociality and dwelling are not always implicit in the construction of meaning, then such conceptualisations of place and non-place alike need to be re-considered. I suggest that transient, solitary, embodied encounters within the spaces of mobility emphasise meanings which are largely hidden when these spaces are experienced through more normative mobilities such as the car. Indeed, as part of this production, cyclists realise that space has no fixed meaning, and they are free to interpret it as they will. The non-places of modernity, when viewed from an alternative perspective, are imbued with meaning as places of significance in people's everyday lives.

So what might all this mean? These ideas might make a valuable contribution to the current thinking which governs transport studies and the wider planning process. As both Bannister (2002) and Lyons (2003) suggest, 'in order to address the agenda for the future of transport ... there is an urgent need to better understand the root causes of travel demand and how these are changing' (Lyons 2003, 5). Lyons goes on to say that consequently, 'transport studies must move outwards from its heartlands in engineering, mathematics, computing, IT and economics' (ibid.). My research points to the fact that travel and route choice are not simply a matter of economic or temporal maximisation, they are also a product of embodiment and ultimately culture.

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Chapter 2

Capitalising on Curiosity: Women's Professional Cycle Racing in the Late-Nineteenth Century

Clare S. Simpson

In 1896, a journalist for *The Hub* reported in an interview that a troupe of French women employed to give cycling exhibitions of speed and skill during their visit to England had earned more than their male counterparts. Mr Josiah Ritchie,¹ managing director of the Royal Aquarium, London, revealed that the women he employed had ultimately secured salaries greater than those Mr Ritchie's company had paid them, for they were quickly 'pounced upon' by agents and cycle makers who substantially increased their terms for appearing. Although Mr Ritchie's company had agreed to pay the women's travel costs to England, later the company also 'settled their hotel bills and supplied them with all refreshments required when in the building. In addition, his company paid the prize money mentioned in the programme: 'Some weeks this totalled up to well over a hundred pounds.' At least once, 'one lady rider ... made between fifty and sixty pounds in a week by these winnings; and that in addition to her regular salary' (How Ladies' Cycle Races are Managed, 1896, 221). Mr Ritchie's exhibition of ladies' cycle races 'proved one of the most powerful attractions we ever had. And besides its numbers the crowd that came to witness the contests was ... the most aristocratic of any that has ever entered our building' (How Ladies' Cycle Races are Managed, 1896, 221). At a time when men's cycle races were no longer a novelty, in Mr Ritchie's view, the women's contests 'aroused the keenest interest amongst ladies even of the aristocracy, and there were often to be seen edging our track quite as many "picture hats" as prosaic "bowlers" and "toppers" (How Ladies' Cycle Races are Managed, 1896, 222). Although the journalist interviewing Mr Ritchie failed to report the numbers that attended this event, we know from other contemporary sources that thousands of people enjoyed the spectacle of women's cycle racing and exhibitions during the late-nineteenth century. What accounts for this huge popularity of women's professional cycling, especially among the upper classes that Mr Ritchie succeeded in attracting? What were the attractions for the audience? Who were the women who raced in front of such large crowds and why did they do it? How were these women able to command salaries, expenses and prizes far in excess of their male counterparts?

¹ To date, no further information about Josiah Ritchie has been recovered.

This chapter documents and explores women's professional cycling in the late-nineteenth century.² The argument proposed is that the popularity of women's cycle racing at the turn of the nineteenth century cannot simply be explained by the Victorian audience's thirst for novelty and the social forces of women's emancipation. Rather, it is the commercial context of cycle racing that best illuminates the mutually beneficial relationships between audiences, racers, and investors such as entrepreneurs, cycle retailers and manufacturers, thus giving women an entrée into the world of professional competition³ whilst at the same time connecting the industry to its female market.

Since scholarly research on women's cycle racing is far from substantial,⁴ I began my exploration by simply listing the names of the women who were involved in professional cycling – track and road racers, and exhibition riders, to get a feel for the numbers involved and with the idea of finding out more about some of these individuals, hoping to learn of their circumstances, motives and experiences in this sport. Around 80 names emerged during an initial search of my sources at hand for the 1890s.⁵ Riders represented British, French, and American nationalities in the main, although there were Italian, Dutch, Belgian, German, and Russian riders as well (see Table 2.1). As might be expected from relying largely on British sources at this stage of the research, detailed interviews published in contemporary literature

² The paucity of primary and secondary sources for women's racing, as well as its uneven representation in those sources points to an over-reliance on one or two sources at this stage of the research, and restricts the scope of discussion to racing that occurred mainly in Britain and the United States. Nevertheless, there is sufficient information to discern some significant social themes pertinent to women's cycling and to provide examples of particular racers, their racing circumstances and their achievements.

³ The classification of female racers as 'professional' or 'amateur' proved problematic. For the purpose of this chapter, I looked at women who, at some time or other, competed full-time and were paid for doing so. The distinction between amateur and professional status was a fraught issue in the late-nineteenth century (McGurn 1999, 115-21; Nye 1988, 47; Vamplew 1988, 189). Vamplew notes that cycling was one of the first new sports to accept the professional. The Bicycle Union allowed professional riders to become members from its inception in 1877. The sport was publicised by a series of races between leading amateurs and professionals. In 1878, the Bicycle Union decreed that a professional 'is one who had ridden a bicycle in public for money, or who has engaged, taught, or assisted in bicycling or any other athletic exercise for money, and that a bicyclist who shall have competed with a professional bicyclist for a prize knowingly and without protest (except at a meeting specially sanctioned by the Union), shall also be considered a professional bicyclist. Any person not included in the above definition shall be considered an amateur bicyclist' (Earl of Albermarle and Hillier 1896, 234).

⁴ I concur with Ritchie (1997) who, among other scholars, argues for sustained research on this topic from the primary sources.

⁵ Initially, primary sources were *The Hub*, *Cycling* (both British magazines), *New Zealand Wheelman*, and *New Zealand Cyclist*; the latter two reported on items of interest from overseas, mainly Britain. It goes without saying that living in New Zealand has made access to sources problematic. Since I began looking at women's racing, around a decade ago, many more sources, particularly secondary ones, have come my way. These are noted throughout this chapter.

Tillie Anderson, USA Miss Anderson, England	Rosina Lane, England 'Lisette', France
Mrs A. Andrews, USA	Frankie Nelson, USA
Helen Baldwin, USA	Mrs Noble, England
Rosa Blackburn, England	Madamoiselle Olga, Russia
Mattie Christopher, USA	Miss Pattison, Scotland
Hélène Dutrieux, Belgium	Tessie Reynolds, England
Dottie Farnsworth, USA	Louise Roger, France
Maggie Foster, England	'Serpolette', France
Margaret Gast, USA	Ida Steiner, Germany
Monica Harwood, England	Beany Vautro [Beane Vantro] France
Nellie Hutton, England	Mrs Ward, England

Table 2.1 Some key nineteenth century female racing cyclists

focused on British riders, but information about international riders of repute was also gleaned; such high-performance international racers were, naturally, featured at length.

Cycle Racing

The mid- to late-nineteenth century was a period of discovery, invention and innovation that engendered a great craving for novelty and excitement in diverse ways amongst Victorians. The bicycle was the most exciting and influential technological development of the nineteenth century. A product of modern ideas, designs and technology, the bicycle was a revolutionary method of transport and an exciting new recreational toy. It soon came to symbolise freedom in a variety of ways; it was an expression of modernity, introducing the novelties of speed and independent mobility. From spontaneous local travel, to carefully planned touring adventures; from a new skill to be mastered, to the potential for a career as a professional rider; from a mere utility, to an important symbol of social status the bicycle touched the lives and affected the lifestyles of millions of people world-wide in the latenineteenth century.

Throughout its early development, the bicycle was popularly used for recreation and sport. Cycling quickly became a highly fashionable pastime amongst respectable people in Western societies in the mid- to late-1890s (see also Mackintosh and Norcliffe, Chapter 8, and Oddy, Chapter 5, both this volume). Its popularity for women peaked around 1896 97 once the drop-frame design⁶ was fitted with pneumatic rather than solid rubber tyres; this peak period of popularity is commonly referred to in the cycling literature as 'the bicycle boom'. The bicycle was of special social significance for nineteenth-century women, furthering social change by challenging conventional practices, beliefs and values. For middle-class women, the bicycle offered unique opportunities to move spontaneously and independently

⁶ Commonly known as a ladies' bicycle.

beyond accepted geographic and social boundaries. Moreover, the bicycle graphically represented a threat to the proprieties governing the behaviour and movements of middle-class women (Simpson, 1998).⁷

From its conception, cycle racing was synonymous with entertainment and was clearly a popular spectator sport. Track racing in particular drew large crowds. During the latter-half of the nineteenth century, velodromes were built in larger towns and cities throughout England, Europe and the United States of America; these facilities advanced the sport of cycling, offering competitors the chance to train and race on good quality, standardised tracks.⁸ Moreover, velodromes seated large crowds of spectators and afforded a panoptic view of events (Eichberg 1995, 336). Such large arena, purpose-built for particular sports in the 1880s, signalled the beginning of modern mass spectatorship as a sporting phenomenon and, with the aid of such facilities, cycling became hugely popular. It was in these velodromes, as well as in the adapted exhibition halls, that women's cycle racing became easily accessible to the large audiences of the 1890s and into the early-twentieth century (Bale 1995, 12; Holt 1989, 159ff; Sjöblom 1997, 54–62).

Whilst competitive racing was largely a male preserve, women began to race at the same time as men (Duncan 1923, 287–90). It is generally agreed amongst cycle historians that the first documented account of women racing occurred in November 1868, when a number of women entered a velocipede race from Paris to Rouen. Exact details are contentious, mainly because contemporary eye-witness accounts do not agree; accordingly, somewhere between one- and 300 competitors entered this race, four to twelve of them women.9 Discrepancies aside, it is important to note that women expressed an interest in cycle racing from the outset. But despite their early foray into the world of cycle competition, which was irregular at best, it was not until the late-1880s and early-1890s that women began to compete with slightly more success, coinciding with the advent of the safety bicycle. By this time, men's cycle racing was well-established and drew a large public following both on the track and the road. Before 1893, when the International Cycling Union (ICU)¹⁰ embraced women's racing under its auspices, women's races had no official status. They were held sporadically and haphazardly, and the results seem to have been recorded for posterity by sports journalists rather than through any official systematic collection. Competitive women's cycling (road and track) subsequently developed unevenly in Europe, Britain, America, and Australia. Both professional and amateur racers set records and were awarded various championship titles, some of which were not necessarily recognised internationally at this point.

⁷ Much elsewhere has been written about the impact of the bicycle on the position of women in society; to recapitulate here would detract from the focus on racing.

⁸ Standardised tracks meant standardised record-keeping and setting, with a high degree of precision (Bale, 1993).

⁹ According to Jean Althusser, there was a velocipede race at Bordeaux on 1 November 1868 (Lawrence 1997, 32–3). Louise Bonneville recorded two women in the Paris to Rouen race, 7 November 1868, whereas H. O. Duncan named three women in the same race; both Bonneville and Duncan were reputed to be at this race (Duncan, 1923; Roberts n.d.).

¹⁰ This organization was superseded by the UCI (Nye 1988, 47). For discussion of the development of British governance and international relations, see McGurn (1999, 108–9).

It is difficult to determine the extent to which women's racing was taken seriously as a sport or viewed merely as entertainment. Women's races were routinely staged between acts at the theatre and music hall, or on the programmes of freak shows, commercial advertising shows, acrobatics exhibitions and so forth. Track racing, both indoors and outdoors, was designed to draw large fee-paying audiences; but opportunities for women to display their skill and speed were often scheduled between the races of prominent cyclists rather than staged in their own right. Official records were seldom in contention unless the 'big names' of internationally known racers were engaged. This is not to say that the racers themselves, their coaches and managers, and a minority of sincerely interested followers of cycle racing, did not take women's performances seriously, for it is clearly evident that they did. Nevertheless, for the large part, the development of women's racing was vulnerable to the patronage of entrepreneurs, to audience demand, and the whims of public opinion and, although various national women's championships were staged during the first half of the twentieth century, it was not until the 1950s that the Union Cycliste Internationale (UCI)¹¹ officially sanctioned women's world championships. Moreover, it was the 1980s before women's cycling was placed on the Olympic Games programme, more than a hundred years after that first race (Perry 1995, 359).

Audiences, Racers and Investors

Women's racing was not simply a product of women wishing to race, and officials arranging competitions. Rather, for women's professional cycle racing to flourish, three key factors had to be simultaneously present: an audience with a thirst for novelty; a supply of willing racers; and the means by which the two could be brought together investors interested in promoting (and exploiting) all things cycling.

Audience Demand

Many sports historians have already documented how, at the end of the nineteenth century, there was a surge of sports spectatorship, brought about by such developments as the confinement of sports to certain geographical spaces (Bale 1995, 12; Ritchie 1998), the development of mass advertising (Petty, 1995), the possibility of professional sport as a career, and the mass consumption of leisure (Bailey, 1978; Mangan, 1988; Mason, 1988; Vamplew, 1988; Holt, 1989). Cycling was one of the greatest spectator sports at this time, drawing tens of thousands at large events, particularly in the mid-1890s (Smith, 1972; McGurn, 1999; Norcliffe, 2001; Herlihy, 2004).

Women racing on bicycles appealed to the sensibilities of audiences on a number of levels. Firstly, the unusual sight of women competing in a sport intrigued audiences. Hitherto, women's sporting competition was largely confined to certain social sets in spatially restricted surroundings examples would include tennis, croquet, archery,

¹¹ Formed in 1900, the UCI was a group led by the Italian and French federations.

and golf, all appropriately genteel sports. But velodromes offered audiences a prime viewing of women racing round and round on a track, better viewing than crowding the roadsides for road events. It seems that public interest in women's competitive cycling gradually grew over the final decade of the nineteenth century, the height of interest being in the years 1896–1898, when long distance races were transferred from the road to the track in response to increasing concerns about public safety on the roads. Unlike a road race, where the cyclist whizzes past once or twice, the track cyclist stays within constant view. The novelty of being able to watch women doing something so unusual was thus a prolonged experience. Mr Ritchie knew he was onto a 'good thing' when he employed women at the Aquarium and placed them first on his nightly programme, as he revealed to *The Hub* reporter: '... as men's races were no novelty, I put on the ladies races first, and they were an instantaneous triumph, although at the start the trade and the Press were dead against us' (How Ladies' Cycle Races are Managed, 1896).

Secondly, the public was unused to seeing women undertaking such a risky venture: the speed and potential danger excited them. It was widely acknowledged that risk was an audience attraction: 'Probably three-fourths of the audience at the Royal Aquarium "ladies' cycle races" (says Bicycling News) attend in the hope of seeing what one man, the other day, termed "a holy smash" (Interesting Bits of Information, 1897). We need to remember that, on the public streets, women were strongly sanctioned from 'fast and furious riding', and so it was a rare thing to witness such a phenomenon and for any duration (Simpson 1998, 137). Thirdly, it is no surprise to learn that male spectators enjoyed the opportunity to view the female body in scant clothing. The display of women's bodies was not new, even for bicycle-related events, but what was new in the 1890s was the prolonged exposure of women's bodies to such a mass of spectators. A report from the United States is typical of this phenomenon: '... in a fair sex's race in Kentucky lately nine out of ten of the competitors wore bloomers, and the bloomers proved to be first-class drawers, as they drew an attendance of nearly 20,000 persons.' (It is said 1897.)¹² An early account of male spectatorship can be found in the published diaries of Arthur Munby (British poet and barrister, 1828 1910) who recorded his experience of watching women race on velocipedes. In his entry of June 21, 1869, he tells of how he went to explore the Royal Gardens in North Woolwich where, in a ballroom in the grounds, he watched an exhibition of velocipede riding by two 'French Female Velocipedists ... two girls of 18 or 20, one of them very pretty, and both wellmade (sic) and graceful.' He describes how they were dressed and that, in their fifteen minute ride, they rose up in their 'stirrups', and proceeded, sometimes at full speed 'throwing one leg or both leges (sic) up'. The 200 or so spectators responded with thunderous applause. Munby records in his diary: "They're fine made girls," said a respectable matron near me; and the man who had charge of their steeds observed "They've got some English velocipede-girls at Cremorne, as rides astride like these here; but lor, they can't hold a candle to these two" (Hudson 1972: 271). Apparently these French women were circus-riders from the Paris Hippodrome, and belonged to a party of six female velocipedists who had been performing there. The fact that they

¹² I am certain the pun on 'drawers' is intentional.

were circus riders explained why, in Munby's mind, they were accustomed to riding astride, since they would have ridden circus horses that way. As if to reconcile the incompatibility between femininity and athleticism, Munby remarked in his diary:

Before they rode, today, I had seen them in the garden, quietly dressed in women's garb, walking to and fro; and in fine weather, they exhibit in the open air as well as in the hall. There was nothing indecent in the performance, or in the girls' behaviour; if once you grant that a woman may, like a man, wear breeches and sit astride in public (in Hudson 1972: 71).

Racing really was a dangerous undertaking, taxing both the health and safety of competitors. For women to deliberately place themselves in such a vulnerable position was beyond the comprehension of most people. Serious accidents in particular drew swift criticism and, in some cases, had a major impact on the future of women's racing opportunities. For example, following the death of English rider Dottie Farnsworth in the United States in 1902, women's racing was suspended there for a time. Farnsworth died from injuries sustained in a fall during a race in New York City (Drieth 2000, 9). Notwithstanding the seriousness of some accidents, the potential dangers of racing were an appealing aspect for audiences.

Finally, the most ardent supporters of women's professional riding came from within the circle of those most committed to either the philosophy of women's social equality, or who were passionately interested in cycle racing of any kind (The Chelsea Rationalists 1898, 419). The strongest support for women's cycle racing came from people allied to the dress reform movement; dress reformers who were also keen cyclists were instrumental in forming women's cycling clubs to promote and assist women into cycling.13 The Chelsea Rationalists exemplified a progressive women's cycling club that approved of women racing. It appears that most of its members were also members of the British Rational Dress Association and both organisations boasted the aristocracy amongst its membership, such as Viscountess Lady Harberton.¹⁴ Of those passionately interested in cycle racing, coaches and male racers were instrumental in assisting women in pursuit of excellence in their sport. Sympathetic male racers trained with and paced women and offered their advice and support; this was appreciated in a predominantly hostile context and many women acknowledged this support publicly. For spectators, there was an underlying ambiguity in their interest titillation and amusement was one thing, but taking women's racing seriously was not an automatic given. Indeed, few spectators seem to have taken women's racing seriously, and the tensions between spectator groups were debated endlessly in the major cycling magazines.¹⁵

¹³ It must be noted that not all dress reformers or women's clubs were necessarily in favour of women's racing.

¹⁴ Lady Harberton was the founder of the Rational Dress Association.

¹⁵ See, for example, the correspondence in the second series British magazine *Cycling* (1891 93).

Supply of Racers

A steady supply of women willing to run the physical and, possibly, moral risks of participating in cycle racing was the second ingredient necessary to satisfy the audience demand for novelty and excitement. It is difficult to tell how many women were interested in cycle racing, for not all those who wanted to race were able to explore this interest. Those women who succeeded in realising their ambition to race were usually supported by husbands, fathers or brothers, many of whom were involved in some way in the cycle trade as manufacturers, retailers, professional racers, journalists, or race promoters. Some women became involved in racing through their own background activities in the theatre or the circus; some had political motivations to race, such as those involved in the rational dress movement. The major office-holders of the Chelsea Rationalists were all well-known professional racers; Monica Harwood, for example, was the club's Captain.¹⁶ The club not only approved of cycle racing, but offered medals and cups 'for those who wish to indulge in speed contests'. In the summer of 1898, the club even contemplated holding a public race meeting at the Putney Velodrome, 'an arena largely in favour with lady riders' (Chelsea Rationalists). Other women were proponents of women's exercise and athleticism, enjoying the physicality of cycle racing.¹⁷ On a more pragmatic level, for racers without the financial backing of family money, prize money was certainly an impetus to compete. British rider Rosa Blackburn, who raced in England and France, earned £26 by coming fourth in a six-days' race at the Aquarium, the winner, known as 'Lisette', winning £60. Josiah Ritchie mentioned sums as large as £100 per week for some women in his Anglo-French promotion in 1896.¹⁸

The women who raced competitively took their sport most seriously. They had coaches and managers as well as promoters, and subscribed to the latest ideas about physical conditioning and training. They were frequently interviewed about their training and diets, and many spoke of their increased sense of well-being as a result of becoming physically fit. Belgian racer Hélène Dutrieux had racing brothers (one of whom was a famous sprinter) and trained with them. She won international titles in 1897 98 and went on to become a stunt rider and circus performer after her racing career. Billed as the 'Human Arrow' in the circus, one of her trade-marks

¹⁶ Monica Harwood was an esteemed and very successful international racer from England.

¹⁷ For example, Beany Vautro (aka Beane Vantro) and Rosina Lane, both sprinters and good handicap racers.

¹⁸ Whilst rates for women have yet to be uncovered, to give an idea of the earnings of a professional racer, a man working at a silk warehouse earned 35 shillings per week. He bought his own bicycle, paid all his expenses, and trained out of work hours. When he turned professional he had a job in a cycle making firm at £8 8s. per week, was given time off to train, had his expenses paid for, and he earned £10 for every new record he set, £5 for each win, and any prize money going – one week he won £45 in prizes, for example (*The Hub*, 7 November 1896, 35). For a working-class woman, to ride professionally was obviously a temptation if she had the talent and drive to compete.

was to loop the loop on a bicycle (Swann 1992, 9).¹⁹ One well-respected trainer who took an interest in female racers was James 'Choppy' Warburton, a working-class man from Lancashire who, himself, was a successful athlete and English Amateur Cycling Champion in 1878. He turned professional in 1879, competed throughout America and was a particularly talented endurance athlete. He was an early advocate of scientific training and diet. Around 1895 96, Warburton discovered 'Lisette', a young French country woman. He took her to Paris and trained her with his male protogés. 'Lisette's' training schedule consisted of keeping regular hours, arising each day at 7 a.m., a plain diet, and a daily massage following an hour's track riding. Constant fresh air via an open window day and night, and an afternoon walk completed her routine. 'Lisette' set numerous records and was considered unbeatable in sprint racing. In 1896, she won the French version of the Women's World Championship, and retired in 1898. Some claimed she was the greatest woman rider who ever appeared on the track, although this accolade was claimed for many outstanding racers (Moore, 2005). American Tillie Anderson was trained and managed by her husband, who gave up his own racing career in order to do so. Racing between 1895 and 1902, Anderson entered 130 races and won all but seven of them. She, too, was touted as the 'world champion' of women's racing, more than filling the grandstand when she toured to Grand Forks with her group of 'lady riders' in 1896 (Spreng n.d.).²⁰ Anderson was singularly focused on her racing career.

Diet was important to these racers and each had her own views on what was expedient, especially during sustained races such as the six-day events. Miss Pattison²¹ of Scotland did not 'diet' but lived 'plainly, but well' on light food while racing and by drinking mild and beef tea. Miss Anderson²² of England, favoured cocoa during races, claiming it had 'sustaining properties'. She also did not 'diet' but never touched spirits or intoxicants. Rosa Blackburn²³ dieted 'slightly' in preparation for a race, did not believe in stimulants 'except for a glass of champagne after a big ride, or a sponge saturated with champagne and lemonade applied to the lips during the run.' She also found milk and eggs during a race very sustaining. Mrs Ward, whose husband frequently accompanied her on long training rides, drank Bass's ale and Vin Cafra wine during racing or record breaking attempts, but did not consider

¹⁹ Later, Dutrieux took to motor sport and aviation. In 1913, she became probably the first aviatrix in France and was awarded the *Légion d'Honneur* (McGurn 1999, 102).

²⁰ Original sources cited in Spreng: *Fergus Falls Daily Journal*, 25 July 1896; *Crookston Times* 27 August 1896; *Grand Forks Herald*, 8 March 1896; *Grand Forks Plain Dealer*, 23 July and 28 August 1896. For more information on Tillie Anderson, see Miller (1997); Seaton (2005); also www.fastwomenproductions.com/.

²¹ Miss Pattison excelled in long distance racing. Eighteen months after she learned to ride, she was a regular competitor at the major English venues at age 19 (*The Hub*, 20 March 1897, 251).

²² Initially a recreational rider, Miss Anderson was 'discovered' by a well-known trainer and rose to her potential over the one-, two-, and three-mile events (*The Hub*, 20 March 1897, 251).

²³ Rosa Blackburn rode and won many six-day races. She raced in England, Scotland and France and raced regularly against 'Lisette' (*The Hub*, 12 March 1898, 231).

spirits of any kind necessary as a stimulant. Bovril she found 'a great support during long journeys'.²⁴

Investors

It is highly unlikely that women would have enjoyed such racing opportunities but for the interest of investors such as entrepreneurs and bicycle manufactures, the third ingredient ensuring the popularity of women's racing.²⁵ There were vast opportunities for making large amounts of money during the late-nineteenth century. Entrepreneurs and manufacturers soon realised how intrigued audiences were by women riding bicycles and, with velodromes and exhibition halls at their disposal, they capitalised on that intrigue.²⁶ Mr Ritchie, for example, was acknowledged as a very skilful entrepreneur of this kind, as champion racer Monica Harwood testified in these words when referring to him: 'the enterprise of the assiduous and genial managing-directory of the Westminster Aquarium' (The English Lady Champion Path Rider 1896, 337).

Partnership Dynamics

The partnerships between audiences, female racers and investors afforded women opportunities to participate in professional cycle racing in front of large audiences and thereby played a critical role in connecting cycle manufacturers to their female market. In order to analyse these partnerships, we must first of all identify the needs of each partner, and the needs which the other partners fulfilled. Then we can examine the specifics of each partnership to see how each partner was integrally involved in this symbiotic relationship, thus enabling women's cycle racing to take place and flourish in this early period of women's professional racing (see Table 2.2).

I have already established above the thirst which nineteenth century audiences had for novelty and entertainment, and cycle racing fitted nicely the phenomenon of developing mass spectatorship at this time. Female racers, in order to fulfil their ambitions, needed specialised equipment to race with – a bicycle, and perhaps some racing clothing and shoes. Racers also needed events in which to race, and a venue. Since these women were cycling professionally, one also might assume they needed a steady income which would provide them with the time necessary for training.²⁷

²⁴ Mrs Ward was considered an all-round athlete, 'equally at home in the water, upon the cycle, and enjoying a country walk by the side of her husband'. She excelled at long distance racing and was an enthusiastic cycle tourer (*The Hub*, 20 March 1897, 252).

²⁵ I have established that opportunities for racing through cycling clubs and racing authorities were rare.

²⁶ Ritchie (1998, 128) notes that indoor long-distance racing was part of the sporting and entertainment currency of the times, beginning with pedestrianism in the early-nineteenth century. Numerous authors note the ways indoor race promoters used female racers to draw audiences (see, for example, authors cited by Petty 1997).

²⁷ At this point, I am assuming that, even for married women, fathers and husbands could not afford to fund the racers completely.

	Need	Offered Racers	Offered Manufacturers	Offered Entrepreneurs
Racers	 Gear to race with Opportunities to race Steady income Time to train 	•	 Identification with female market Demand for racing cycles Advertising via exposure to audience 	 Audience appeal Reliability of supply
Manufacturers	 Market to buy product Ways of connecting with the market (ads, sales reps, racers to sponsor, race events to show off bikes) To stay abreast of competition New markets 	 Gear to race with Steady income Time to train 	•	 A 'craze' to capitalise on Advertising avenues
Entrepreneurs	 Racers Venues Advertising avenues Audiences 	 Events in which to race Appearance fees Prizes and prize-money 	Connection with the markets via the venue and event	

Table 2.2 Partnership dynamics: three-way relationships between racers, manufacturers and entrepreneurs

Amongst investors, manufacturers and retailers needed a market to buy their cycles and, given the fierce competition in the cycling industry by the mid-1890s, they needed to market their product in novel ways as well as to seek new markets, such as women and children.²⁸ Finally, entrepreneurs needed something to sell, in this case entertainment, and venues in which to display their commodity. They also needed a steady supply of willing racers, admission sales, and widespread advertising to ensure a return on their capital outlay.

Having established, in a rather crude way, the needs of each group, what were the dynamics that bound them together? Firstly, the relationship between racers and their audiences revolved primarily around the concept of novelty, new competitors being the key ingredient for the dynamics of sporting competition and, in the process, the development of known competitors' skills. Thus, audiences, once they grew accustomed to the appearance of women on the tracks per se²⁹ and their scant attire, were keen to watch a changing parade of competitors. As women became more competent racers, and the pool of competitors grew, some element of novelty was assured. Probably, skilled competition provided audiences with a sense of getting value for their money, and the continued sight of women in tight-fitting racing attire kept their attention into the bargain. With audience following guaranteed, investors were more willing to support women's racing.

The second dynamic, the relationship between racers and investors, centred essentially on commodities and markets and the significance of marketing as the means to connect the two. The investor group can be further divided into two types: manufacturers and retailers, whose aim was to put the product to the market; and entrepreneurs, whose aim was to make explicit the link between the product and consumer and make a profit in the process.³⁰ The manufacturing sector made fast, lightweight racing cycles, and they needed ways of marketing these and their generic models. Many male racers were employees of particular companies, their sole role being to enter and win as many races as possible using the model made by that company. The same arrangement was made with female riders. In addition to supplying machines, manufacturers and retailers routinely put up prizes and prize money. Rosa Blackburn, who rode a Triumph with Dunlop tyres, for example, collected prizes and salary of about £140 during eight weeks of racing at the Aquarium in December 1896 (Three Years on as a Lady Rider 1896, 87). Thus, manufacturers and associated retailers supplied cycling equipment, and regular income, allowing women to train and compete full time.

For their part, the appearance of the female racing cyclist at large racing events in velodromes played an important role in assisting manufacturers and retailers, by

²⁸ In his economic analysis of professional sport, Wray Vamplew (1988, 180) makes the point that cycle manufacturers regarded the sponsoring of meetings and riders as a form of advertising.

²⁹ Clearly, opponents of women's racing spectators and non-spectators alike, never got used to the idea and sustained their objections for the duration.

³⁰ This is deliberately simplistic, for one must also acknowledge the active role of the print media in promoting the links between producers and consumers. Nevertheless, for the purpose of this chapter, I am interested in examining the staged promotion of cycling as a performance spectacle in the context of racing in velodromes.

marketing their cycles. Events displayed various models of bicycles to thousands of potential buyers, and audiences witnessed the literal connection between women and bicycles. The practice of linking advertising to bicycle racers was commonplace (Petty 1995, 40), and when a rider was proclaimed a champion, the credit was claimed by the maker of the machine and its components rather than the rider's efforts.³¹ From a marketing angle, Ross Petty argues: 'The industry also developed new promotional techniques, including sponsoring racing teams and obtaining celebrity endorsements' (Petty 1995, 32). Furthermore, he notes that companies 'paid famous athletes to promote their products' (Petty 1995, 40). With the excitement inherent in an event with large spectator numbers, manufacturers probably hoped that women in the audience might become excited enough about riding bicycles that they would purchase one. Celebrity figures such as famous actresses, athletes, acrobats and circus performers who cycled or who had turned to cycling were often used to promote products. Press interviews with professional female riders routinely highlighted the models they rode; such interviews thus widely endorsed manufacturers' brands, amplifying existing intense advertising. For example, Nellie Hutton, aged 15 years in 1896, and daughter of Mr Hutton of the Petherton Cycle Company, always rode one of her father's bicycles, a Petherton, The Hub reported (A famous lady racer 1896, 283). In these ways, women's racing may have served to make direct connections between manufacturers and the potential female market.

But the link between women's racing and women's recreational riding is tenuous and requires further analysis; suffice to say, the connection is more complex than for male riders for whom sports riding was not contentious. Certainly, the strategy to market bicycles to women *via* women's racing was a risky one. Weaver and Weaver rightly argue that 'the mercenary bonds between athletes and consumer products had to be carefully constructed by publicists' (Weaver and Weaver 1999, 94). The social climate of competition at this time was still largely dominated by the vestiges of honourable amateurism which, in the words of Stephen Hardy, 'sometimes rebuffed the modern logic of capitalism' (cited in Weaver and Weaver 1999, 95).

One female market segment that may have been amenable to the associations between women's racing and general riding was the so-called 'New Woman', an iconic representation of socially progressive women. Indeed, many advertisements showed 'New Women' on racing models or, at the very least, riding swiftly and dressed in rational costumes. Interestingly, it was traditional male machines that were usually associated with the 'New Woman' who, most usually in her representation, wore a bifurcated costume, ideally suited to riding a male model of bicycle; see, for example, the image of the 'Opel' (Figure 2.1) which was one of several 'male' models that were marketed to women. It is no coincidence that the sub-title reads 'die Siegerin' (the Winner). Note, too, that this design was used by female racers since it was the most efficient and durable for racing purposes (Rennert, 1973).³²

³¹ Fitzpatrick (1980, 47), citing from the *Austral Wheel*. For an excellent case study on how the Dunlop Tyre Company used long-distance overland racing to endorse its product, see Weaver and Weaver (1999).

³² Incidentally, representations of women as classic nearly naked Greek goddesses were widely used to advertise male models of cycle such as the 'Gladiator', the 'Falcon' and the



Figure 2.1 Woman in traditional dress advertising a 'male' Opel

Market segmentation became increasingly important as manufacturers vied for markets, and the female market was seen as sufficiently lucrative to warrant investment. According to Petty (1995, 33), cycle advertisers were among the first to present media images of women 'as active, independent people who enjoyed recreational pursuits'. Petty's research shows that the bicycle industry advanced the practice of advertising by 'developing competitive content, using images in posters, developing research techniques to determine effectiveness, and supporting a new media, magazines' (Petty 1995, 33). To my mind, the marketing of cycles to more conservative female riders required the use of conventional images of women that neatly aligned with prevailing ideas about female public respectability and therefore emphasised grace, modesty, simple pleasures and wholesome companionship,³³ and these connections were unlikely to be made in the context of racing. That being said, there were numerous advertisements for men's cycles in which women were depicted not wearing rational dress; the inference must be drawn that, as today, sex sells.³⁴

In this context of aggressive marketing, the role entrepreneurs played in ensuring the popularity of women's professional cycling was critical. Simply put, they provided both competition opportunities and venues; without these, it is highly unlikely that women's racing would have advanced during this period, for we already know that cycling clubs did little to develop it. The fact that races and exhibitions were held in large venues was an extra bonus to the racers, the crowd response spurring them on to faster times and greater feats of endurance. Mr Josiah Ritchie was astutely conscious of the role the audience played in heightening their own entertainment, commenting:

Applause and the strains of music have more effect on women than men riders. A burst of cheering will often thoroughly revive the woman competitor; and some of them do better with a series of sudden rushes, that bring encouraging shouts from the crowd than with a steady, slogging pace (cited in 'A Famous Lady Racer' 1896, 283).

Entrepreneurs were also able to negotiate appearance fees and prizes for the competitors, sometimes drawing in the commercial retail and manufacturing sectors to increase the stakes, judging by the kinds of prizes sometimes offered (for example, precious jewellery, gold medals and silver trophies).³⁵

^{&#}x27;Liberator'.

³³ I have commented on this elsewhere (see, for example, Simpson, 2003).

³⁴ To add to the complexity of marketing and women, an advertisement for Cottereau Cycles, in Dijon, 1895, depicts a woman in a bifurcated costume riding a 'male' bicycle whilst breastfeeding a baby (Dodge 1996, 117).

³⁵ I am grateful to the editors for pointing out that thirty or more years later, Reg Harris (Raleigh's star racer of the 1940s/50s) made his living as an amateur cyclist by selling the assorted prizes he won at amateur races, before he turned professional. The editors rightly raise these questions: Could this have been part of the women racers' approach too, and to what extent could a woman make an independent living as a racer? Was the income sufficient for anybody to survive on, or only women with support from parents or husbands? Further research of the primary sources is required to answer these questions.

For their part, the racers were the 'raw material' with which the entrepreneurs worked. Women held great audience appeal and entrepreneurs, as I mentioned above, capitalised on this. With women becoming increasingly interested in racing during the 1890s, there gradually developed a steady supply of new racers, many of whom were in their early teens when they started on the professional circuit. Although overall numbers were small, there were enough competitors to ensure variety in the racing; the injection of French, Italian, and German teams and individuals also enhanced the attraction for audiences.

Finally, cycle manufacturers and entrepreneurs also mutually benefited by their association. Manufacturers worked hard to create a demand for cycles and to provide a constant supply. By clever advertising strategies such as sponsoring racing teams and obtaining celebrity endorsement, they stimulated the 'craze' to cycle and to own bicycles. By annually changing the appearance of models, they also appealed to the status-conscious, who must own the latest model. For middle-class women, this was particularly significant, for social standing and appearances were very important. The access that entrepreneurs had to large venues such as velodromes and exhibition halls was ideally suited to the manufacturers' need to promote their products to women as well as men; moreover, the annual replacement of fashionable women's cycles was in line with contemporary commodity culture which included leisure goods (Rojek, 1995, especially Chapter 2). Each racing season saw the display of new models which epitomised speed and handling qualities. Few women would have wanted to become racers, and the racing models were 'male' in design in any case and, thereby, unappealing to the female market. But new women's models were launched at the start of each racing season; seeing women race primed the public consciousness to embrace the new norm of women as cyclists. The manufacturer/ entrepreneur relationship was clearly mediated to a certain extent through female racers for, thanks to their popularity, it was through these women that markets were reached and a new demand was voiced. As Thomas Richards (1991, 1) succinctly puts it: 'fundamental imperatives of the capitalist system became tangled up with certain kinds of cultural forms, which after a time became indistinguishable from economic forms'.

Conclusion

Women's cycle racing can be interpreted as a gendered expression of modernity and thus as quite distinct from men's experiences, whose racing represented speed, freedom, novelty, and challenge; whilst this was true also for women, their racing did not necessarily 'free' them in any significant social sense. Their foray into the public space of the velodrome or the road race was at a cost: their display brought ridicule and threats, public criticism and, in the interests of their safety, a ban on women's racing that persisted for half a century. This chapter has shown the existence and rationale for a mutually beneficial three-way relationship between female cycle racers, their audiences and investors in cycling – manufacturers, retailer and entrepreneurs. Without these relationships, it is unlikely that female racing would have occurred on such a scale and with such publicity. The phenomenon of their popularity must be one of the rare times in history when sportswomen have earned more money than sportsmen within the same sporting code. This could only have occurred in the context of the late-nineteenth century because of three necessary factors: the demand for novelty on the part of the audience; a desire to do something novel and physical on the part of the racers; and the strong forces of broad commercial interests.

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Barriers to Cycling: An Exploration of Quantitative Analyses

John Parkin, Tim Ryley and Tim Jones

Introduction

After many years when cycling was left in the policy wilderness in the UK, the Conservative Government established a strategy for cycling in 1996 (Department for Transport, 1996). An often quoted target of the strategy was to double cycle use by 2002 and double it again by 2012 relative to the 1996 level. In a policy atmosphere increasingly aware of environmental issues, the newly elected Labour Government in 1997 maintained this aspiration but moderated the target in its Ten Year Transport Plan (Department for Transport, 2000) to trebling 2000 levels by 2010. The Transport White Paper of 2004 (Department for Transport, 2004a) lengthens the time scale for transport planning to 2030 and contains a policy aim simply to increase cycle use, making it more convenient, attractive and realistic for short journeys, especially those to work and school. At the time of writing, therefore, there is no specific national cycling target, although guidance as part of the Local Transport Plan process¹ mandates local authorities to set 'sharper and more focused' local targets.

While cycling is increasingly considered important for inclusion in local transport policies, there is little evidence of widespread growth in cycling. This is despite the realisation of some infrastructure measures and promotion initiatives deemed appropriate for increasing cycle use. It is important to understand the relative contributions that different policy instruments might make to increasing cycle use, and this is the subject of a small but growing body of work within the field of transport studies. It could be argued that, despite cycling policy failing to deliver positive results, cycling remains high on the transport agenda because of its potential contribution to policies on climate change, social inclusion, health, exercise, obesity and sustainable development. Close scrutiny of cycling-related data may reveal reasons for the gap between potential and delivery, and indicate the appropriate direction in which policy measures ought to be taken in order to become more effective.

This chapter examines a range of quantitative analyses of cycling behaviours, and within a UK policy setting, explores some implications of those analyses. It

¹ Local Transport Plans are the mechanism by which local highway authorities in the UK set out their periodic bids for central government transport funding.

reviews quantitative evidence, and discusses the relative contributions made by different factors to cycling levels; these include social and demographic factors such as class and age, physical factors such as climate and hilliness, and highway design factors. The chapter begins by describing the different quantitative approaches open to cycle planners and analysts, particularly differentiating between data derived from monitoring studies and outcomes from the analysis of relationships between cycle use and influencing factors. It goes on to describe and evaluate findings from a range of recent quantitative analyses. Finally, it recommends developments to enhance the contribution of quantitative methods to our understanding of the important issues affecting cycle use, and comments on the implications of the findings for the promotion of cycling.

Quantitative Methods in Cycle Planning

This section is divided into three parts. First, we briefly discuss UK cycling data derived from monitoring studies. Second, by way of preparation for the main part of the chapter, we discuss at a relatively general level the quantitative techniques which are available for analysis of the relationships between (actual and hypothetical) cycle use and a wide range of factors which potentially influence cycle use. Third, we outline potentially useful future developments in quantitative research into cycling.

Monitoring Cycling Levels

Estimates of historic travel patterns are produced from either counts taken on the highway or surveys of trip making undertaken at the level of the household. For UK road transport there are two main statistics at a national level: the National Road Traffic Estimates (NRTE), measured in vehicle kilometres by class of vehicle and estimated from highway counts; and the National Travel Survey (NTS), showing person kilometres by type of vehicle, derived from household surveys.

Using 1996 as a base year, the National Road Traffic Estimates show an increase in cycle traffic of 10.7 per cent to a level of 4.5 billion cycle kilometres in 2003. Over the same period, The National Travel Survey shows a decline of 10.5 per cent to 34 miles per person per year in average distance cycled, and a decline in the average number of bicycle trips made of 22.2 per cent to 14 trips per person per year. Differences in trends and year-to-year volatility in estimates from the National Travel Survey, the National Road Traffic Estimates and other independently produced estimates (for example those of Sustrans (Cope et al. 2005), which also cover routes that do not form part of the public highway and which are not covered by either the NRTE or NTS) are partly due to the relatively low volume of cycle traffic. This leads to wide confidence intervals.² Such differences are also due to the effects of the sampling methodology (Department for Transport, 2004b). The structure of both main data sets is aggregated to a national level, and neither data set is valid at a

² A confidence interval is a range over which an estimate may vary, defined by a probability of lying within that interval, for example we may be 95 per cent certain that an estimate lies in the confidence interval.

more geographically disaggregate level. The use of appropriate statistical techniques to analyse the data as a time series (for example, Parkin, 2001; Cope, Abbess and Parkin, 2005) has a part to play in monitoring, and more development in this field of inquiry is required.

A further source of national data on cycling is the census. This provides a comprehensive picture of mode choice, but only for the journey to work, and only at a single point in time, early spring every ten years. It should also be noted that the use of the bicycle for access journeys, for example to railway stations, is not reflected in census data as only the mode of transport used for the longest leg of a multi-leg journey is recorded. This results in under-reporting of actual cycle use. Table 3.1 shows the overall percentage of journeys by bicycle for the journey to work.

The decline in cycle use evident in the decade to 1991 has not been replicated to the same extent in the subsequent decade, suggesting that use of the bicycle for journeys to work may have reached its nadir. A full discussion of variation in cycling levels by region and district is provided by Parkin (2003); at a purely descriptive level, Parkin's study demonstrates the link between cycle use and topographical and climatic factors, with higher cycle use across the flatter, drier east of England and the warmer south of England. The importance of topography and climate to levels of cycling will be explored in more detail below.

Understanding Why People Do (Not) Cycle

The derivation of relationships between an observable choice to cycle and the factors that influence that choice is a complex process. The starting point is the appropriate measurement of relevant influencing factors. Transport planning usually affords primacy to estimates of cost and time, but there is another area of difficulty in the modelling of cycling because a further significant resource that is consumed is effort expended by the cyclist, and this needs careful consideration. Other less tangible factors, such as self image, perceived ability and social norms also play a part.

Manufacturers of cars and public transport vehicles go to great lengths to create an appropriate indoor environment for travellers, and the nature of the vehicle is an important further consideration in transport demand modelling because the

DIC	ycle 1981, 1991 and 2001			
	1981	1991	2001	
England	4.11%	3.21%	3.11%	
Wales	1.59%	1.41%	1.53%	
Scotland	1.44%	1.36%	1.53%	
Great Britain	3.76%	2.97%	2.89%	

Table 3.1Percentage of journeys to work by
bicycle 1981, 1991 and 2001

Note: All figures calculated by removing those who work or study mainly from home. Source: ONS (undated).

perceived quality of the in-vehicle environment on a journey will affect choices amongst modes. Similarly, the comfort, aesthetics, luggage handling and gearing of the bicycle are all important. In addition, the environment through which a cycle travels is the cycling equivalent of in-vehicle space, and so the characteristics of that cycling environment are equally significant. Important factors here are likely to be the comfort of the route as determined by surface condition, the general attractiveness of the route and the relative absence or presence of motor traffic, which may influence both perceptions of risk and levels of noise and air pollution.

The genesis of much cycle design guidance that is now adopted in the UK and elsewhere is the Dutch cycling design guidance (CROW, 1993a, 1993b), which identifies the following fundamental infrastructure requirements for cycling:

- Coherent/comprehensive: a comprehensive network linked to where cyclists begin and end their journeys;
- Direct: a system of connections which is as direct as possible and avoids detours;
- Attractive: design and integration with surroundings should make it pleasant to cycle;
- Safe: facilities that guarantee safety from other road users and take account of personal security as well as road safety;
- Comfortable: facilities that allow a rapid and comfortable flow of bicycle traffic.

This list provides a valuable aid for designers when developing routes and designing routes in detail. The issues of network coherence, directness and comfort (surface condition) are all in some way related to effort, while the issues of attractiveness and safety are related to the environment surrounding the cyclist. Some cyclists may be content to trade a lack of directness for enhanced safety, whereas others may place a higher value on a direct route with a quicker journey time.

Mathematical models can be used to estimate the relative weights of different influencing factors. Such models may be built using data derived from groups of people, for example using census data for a given geographical area such as a ward or some other defined zone. Such so-called aggregate models group data using averages, proportions or totals. Transport variables relate to the characteristics of the transport system that connects the zones. For cycling, additional transport system variables are required in order to consider the effects of effort expended and the cycling environment.

An alternative approach derives relationships of choice to influencing factors at the 'disaggregate' level of an individual, either revealed through a survey of a person's recent trip making activity (revealed preference data) or through statements about hypothetical choices they would make given different system variables (stated preference data), such as time and distance. Disaggregate models of the cycling choices individuals make (so-called discrete choice models) can be developed using revealed and/or stated preference data. Traditionally, revealed preference data was used to model choices, but models based on stated preference data have been increasingly used to aid understanding of decision-making processes. Discrete choice models that use stated preference data tend to concern either cyclist route choice ('as a cyclist, which route would I take?') or a mode choice that includes cycling ('would I cycle or use an alternative mode of transport?'). Route choice models assist in understanding the relative influences of features of routes, and are useful in developing appropriate infrastructure for cyclists. Mode choice models assist in understanding the relative influences of factors pertaining to the choice of the bicycle, and are useful in developing infrastructure and wider promotional measures to encourage cycle use. The main advantage of stated preference based techniques is that they allow the testing of hypothetical measures, such as the effect of cycling measures not yet implemented. However, this benefit needs to be balanced against the uncertainty as to whether respondents would actually make the decision. It is preferable, therefore, to incorporate both revealed and stated preference data into discrete choice models.

Both disaggregate and aggregate quantitative modelling, therefore, have a complementary contribution to make to our understanding of choice for the bicycle.

Potential Further Developments in Quantitative Methods

To improve on current understandings as to why people do or do not cycle, two main issues need to be addressed in quantitative research into cycling. First, the range and type of data collected and analysed needs to be broader than what is deemed adequate for other modes of transport, to include factors relating to effort and environment. Second, the choice mechanisms that ought to be considered in relation to cycling may be more involved, and result from more complex responses involving the broader range of data. These may include personal, social and cultural factors, such as life stage, not often considered in transport modelling.

Given this choice complexity, there is growing interest in understanding transport choice for modes such as the bicycle in other ways. One approach is based on an understanding of decision making that is extended over time. Decision making is not a purely abstract, rational calculation but is related to a range of factors that can be characterised as 'personal attitude', 'the social norm' and 'control factors' (that is, those real and perceived factors that either facilitate or inhibit a person's ability to perform the behaviour) (Ajzen, 1985). This approach has been used in various European studies (for example, Bamberg and Schmidt, 1994; Forward, 1998) to show the significance of control factors. Other approaches include the adoption of a marketing paradigm called diffusion theory (after Rogers, 1983), and a hierarchical model based on progression through a series of choice levels where successful progression to the next choice stage is dependent on a positive outcome at the previous level in the hierarchy (for example, Brög, 1982). These different approaches may better account for the particularly strong physical, environmental and cultural factors involved in decisions to (not) cycle than do choice models which simply emphasise time and cost.

Findings from Quantitative Analyses

Utilising a range of quantitative analyses of cycling, we turn now to detailed exploration of the different factors involved in decisions to cycle, or not to cycle. We begin with an assessment of the role of demographic and personal factors, including the significance of car ownership, journey distance, journey purpose, bicycle ownership, class, age, and concerns for health and the environment. We then move onto consideration of the physical factors of climate and topography. Finally in this section, we explore the influence of factors related to the transport environment, such as prevailing traffic conditions, traffic risk and the qualities of cycling routes. All these factors are clearly of significance in influencing whether or not someone decides to cycle; our aim in this section is to use existing evidence, derived from quantitative research, to assess just how influential each of the factors might be.

Car Ownership and Journey Distance

Rising car ownership and use has dramatically changed the nature of urban areas and patterns of travel over the last half century. People today make more trips and travel further than ever before, and this has resulted in changed patterns of land use and the entrenchment of car dependency. So, for example, out-of-town retail and leisure centres develop at locations remote from traditional urban centres, often clustering around nodes on the motorway network. Increasing traffic congestion within urban areas has exacerbated this trend for development in non-urban areas.

Two important features of travel by car are, firstly, the flexibility of both the journey destination and route choice and, secondly, the ability to choose start and end times free of public transport timetabling constraints. The bicycle also exhibits this flexibility and freedom, but only over shorter journey distances.

The 2001 census shows that just 8 per cent of employees in England and Wales live in a household with no car or van available. In the past, it is these households which have been seen as potentially most receptive to cycling. However, in a study of the variation in cycle use for the journey to work at ward level for England and Wales, Parkin (2004) found that employees in households with one car are more likely to cycle than their counterparts in households with no car. It is only at the level of two cars or more that the propensity to cycle is reduced, or 'suppressed' in transport research terminology. The effect is different for London, where ownership of multiple cars in a household is lower than the rest of the country.

It may no longer be assumed, therefore, that greater propensity to cycle is linked with not owning a car. Promotion strategies for cycling should recognise that the greatest potential market for growth in cycling will in fact be drawn from carowning households. The important point to promote is the greater flexibility of a bicycle compared with a car, particularly in congested urban conditions where car journey time reliability is worse than for a bicycle. Davies et al. (2001) demonstrate that beyond the 15 per cent of the population that is positive towards cycling and already cycles regularly or quite often, the next 20 per cent of the market 'closest' to adopting cycling are likely to own a car, but only between 67 per cent and 80 per cent own a bicycle. Thus, there is clear potential to promote cycling among carowning households and individuals who do not currently own bicycles.

Parkin (2004) analysed the effect of distance to work relative to propensity to use the bicycle. Distances in the census data are banded as 'less than 2 km', '2 km to less than 5 km', '5 km to less than 10 km', and four higher distance bands. Wards with a higher proportion of workers in the travel distance band '2 km to less than 5 km' show a higher level of cycle journeys to work. Distances of less than 2 km are likely to be less popular for cycling because they are within walking distance. At distances over 5 km the time and effort required to cycle are likely to militate against bicycle use. The experience of the Danish city of Copenhagen shows time savings for journeys up to 5 km, but it is worth noting that distances up to 10 km remain well within the parameters of a half hour journey time, and the city authorities are aiming to increase cycling speeds in order to facilitate these longer journeys (City of Copenhagen, 2002).

It is important for cycle planners to recognise that cycle journeys are most likely to take place between a home origin and destination located in an urban centre or at a public transport node, such as a railway station. When routes for cycle traffic are being considered, they should be planned for distances of at least 2 km from these destinations towards residential areas.

Journey Purpose and Bicycle Ownership

The 1999/2001 National Travel Survey shows that 42 per cent of bicycle trips are for work and business, 32 per cent for leisure and 12 per cent for shopping. However, there are methodological problems with the collection of NTS data, which may not record home-based bicycle travel that is entirely for recreational purposes: for example, a car journey to access a mountain biking centre would be recorded as a leisure journey by car, but a purely recreational cycle ride from home may not be counted as a home-based cycle journey for recreation. Furthermore, the NTS does not record journeys that take place off the public highway. Thus, there is underreporting of the journeys taking place along newly created traffic-free paths and segregated roadside facilities.

The General Household Survey of 2002 found that cycling is the fourth most popular sport, game and physical activity (19 per cent of adults had participated in the last 12 months, and 9 per cent in the last 4 weeks). Although cycling was included irrespective of the purpose, there is evidence that many respondents will have participated in this activity for recreational purposes. For example, Cope et al. (2003) report that two-thirds of those who access the National Cycle Network do so for recreational purposes, and that around one-quarter of all users cite health and/or fitness reasons. Off-road trail riding (more commonly known as 'mountain biking') has particularly captured the minds of the British public, and has changed from an obscure hobby to a regular pastime for around 1.5 million Britons, with a further 1.9 million taking part in this activity on a less frequent basis (Mintel, 2001).

One factor encouraging participation in recreational cycling is cycle technology and fashion. Trends in bicycle sales for the UK are difficult to ascertain because there is no reliable bicycle sales statistical service; this results in a reliance on

anecdotal information from within the cycle industry. The Bicycle Association estimates that around two million cycles are sold annually in the UK, with mountain bikes accounting for 60 per cent of all sales. Mintel (2005) suggests a higher figure of approximately 2.4 million cycles sold per year, with total spending on cycles in the UK currently running at around £300 million per annum. Such figures suggest the average price of a bicycle to be around £125, arguably making the practice of cycling more affordable than ever.

Anecdotal evidence from the cycle industry suggests that the mountain bike boom is over, and growth is instead now being witnessed in sales of 'comfort bikes' and 'fast city bikes' (also known as 'trekking bikes' or 'hybrids'), adept on tarmac as well as rough trails. Market analysts also predict rising demand for cycles over the next decade as various cycling promotion schemes take effect; these include 'Bike Hub', an industry wide initiative to support the future of cycling, and the ongoing development of the National Cycle Network.

In a study of over 500 cyclists, Gardner (1998) tried to establish why increased leisure cycling has not obviously led to more people cycling to work. He found a conflict between the image of leisure cycling as calm, peaceful and liberating, and of utility cycling as dangerous, demanding and stressful, and as requiring immense self-discipline. Despite this, Gardner suggests that leisure cycling has a part to play in fostering and/or preserving the cycling habit, and he notes how the mountain bike in particular has re-involved lapsed childhood cyclists. Gardner also notes that many people who currently cycle for utility purposes claim that leisure cycling did encourage them to try cycling to work. Thus, leisure cycling is worth encouraging, and efforts should be made to extend to urban utility journeys the characteristics evident in the environment of leisure cycling journeys.

Socio-economic Classification and Age

At an aggregate level it may be possible to detect variation in use of the bicycle by socio-economic classification and age. Parkin (2004) found no clear pattern in the use of bicycles by socio-economic classification. This runs counter to earlier views (for example, Waldman, 1977) that cycling, being relatively cheap, is the preserve of lower socio-economic classes. Parkin's finding receives support from the high levels of cycling in some gentrified parts of London (for example, Hackney, with 7 per cent cycling to work from the 2001 census). The impact of high proportions of students concentrated in city centres is undoubtedly one reason for greater cycle use in the two ancient university cities (Cambridge at 28 per cent of all journeys, and Oxford at 16 per cent). However, in his study at ward level, Parkin (2004) found that the proportion of students in a ward was not a significant predictor of the proportion of the ward as a whole that would cycle for the journey to work.

Parkin also found that a higher proportion of people cycle to work in wards with a higher proportion of workers aged 34 and under. This finding could be linked with lower levels of car ownership, and also with younger people tending to live in more central urban locations. There is certainly potential for greater cycle use in the future if existing cohorts are encouraged to continue cycling as new younger cohorts are introduced to its pleasures and benefits. Disaggregate stated preference studies from some parts of the world have detected variations in the propensity to cycle based on socio-economic classification and age. Discrete choice model estimation by Ortuzar, Iacobelli and Valeze (2000), based on stated preference data from Santiago in Chile, found those respondents most willing to cycle to be young, on low incomes, without a car in the household and with a low educational level. The discontinuity with UK findings suggests that cross-cultural differences may be at play here.

Health and Environmental Imperatives

The link between cycling and good health is well established (British Medical Association, 1992). However, the British Medical Association also reports that one of the major deterrents to cycling since the growth in availability of cars has been public attitudes to cyclists as 'second class' road users. These attitudes may change if the advantages of cycling as a means of gaining and maintaining fitness become more widely accepted. The effects of a disregard for health, particularly in relation to the propensity to become obese, are more present in the minds of the public after the widespread recent media reporting of the so-called obesity epidemic in the UK.

Hillsdon and Thorogood (1996) show that activities that can become part of everyday life, such as walking or cycling to work, are more likely to be sustained than activities that require attendance at specific venues. Cope et al. (2003) claim that 70 per cent of adult users of the National Cycle Network report that it has helped them increase their level of physical activity (although lack of evidence as to users' previous activity levels makes such self-reported changes difficult to substantiate).

Exhortations to cycle for environmental reasons may appear persuasive and logical from a policy perspective, because of cycling's clear environmental and traffic congestion reduction benefits. Nonetheless, it seems likely that the personal benefits of greater fitness and reduced potential ill health will tempt more people (back) into the saddle.

Physical Factors

Cycling is distinct from other forms of vehicle transport in that it requires human effort to provide the locomotion. This is self-evidently true of walking, but the coupling of a rider with a machine appears to heighten awareness of the effort being made. The amount of effort required is the result of a combination of the mass of the rider and bicycle, the rotational mass of the wheels, the gradient, the rolling and air resistances and the mechanical efficiency of the bicycle. Over periods of between 20 minutes and an hour, a typical power output for a non-athlete cyclist is 75 watts; this may rise to 200–250 watts for healthy male touring cyclists, and to 350–400 watts for racing cyclists (Whitt and Wilson, 1982). The non-policy sensitive variables of hilliness and wind speed will affect the power consumption requirements of a bicycle, as will the number of times a cyclist has to stop or slow down on a journey, and hence have to speed up again, which requires acceleration and hence additional effort. The number of stops and starts is related to the design of the infrastructure, and may be influenced by appropriate policy and design philosophy.

Let us assume a notional head wind and two stops and starts per kilometre. Under such conditions, a cyclist with a power output of 75 watts would be able to travel only 75 per cent as far for the same total energy output on a route with gradients constantly varying between 3 per cent up and 3 per cent down, as compared with the same journey on a completely flat route. This demonstrates the significant physical impact of hills on the effort required to cycle.

Parkin (2004) confirms that hilliness in a district, measured as the proportion of kilometre squares in a district with an average gradient of 3 per cent or more, has one of the largest influences on the proportion of people cycling to work at ward level. A 10 per cent increase in the size of the variable for hilliness is linked with a 10 15 per cent reduction in the proportion of people cycling to work.

The experience of the cyclist is partly determined by the environment through which he or she cycles, and this environment is very significantly influenced by climatic conditions, which in turn are influenced by the time of year and also time of day (lightness and darkness). Emmerson, Ryley and Davies (1998) analysed climate and cycling data for two locations, one on the Wirral, north-west England, the other in Essex, south-east England. They found that the month of the year and the day of the week explained more of the variation in cycle flows at the sites under consideration than did the weather conditions. However, using data for all 8,800 wards in England and Wales, Parkin (2004) found that a 10 per cent lower rainfall and a 10 per cent higher mean temperature were both linked with a 5 per cent higher proportion of people cycling to work. Neither a measure for windiness nor number of hours of sunshine proved statistically significant.

At a more disaggregate level, Ryley (2005) analysed the types of individuals that might be affected by hilliness and rainfall in their decision as to whether or not to cycle. A household survey in west Edinburgh included the following two attitudinal statements: 'Edinburgh is too hilly to cycle' and 'Edinburgh is too wet to cycle'. Individuals agreeing with one statement also tended to agree with the other; approximately one-fifth of respondents agreed with each statement. Testing by various socio-economic and transport variables (age, gender, household income, bicycle availability, motor car availability and frequency of driving, cycling and walking) showed gender to be the most significant factor, with women far more likely than men to find Edinburgh too hilly and too wet for cycling.

It is generally not possible or practical to adjust hilliness or climatic conditions through policy interventions.³ However, it is important to recognise the impact these factors have on cycling levels, and to realise that there is a lower upper bound to the quantity of cycling that may be attainable in hillier, wetter and cooler regions.

³ Interventions are possible; for example, a route with switchbacks up a steep gradient, large scale earth-moving, innovative schemes such as the cycle lift in Trondheim in Norway, and covered cycling corridors. They are, however, often costly or otherwise impractical within many contexts.

Traffic Conditions and Perception of Risk

There exists a growing corpus of work evaluating the perception of risk of cycling in different conditions (for example, Landis, Vattikuti and Brannick, 1997; Harkey, Reinfurt and Knuiman, 1998; Guthrie, Davies and Gardner, 2001; Landis et al., 2003; Parkin, Wardman and Page, 2007). Early work considered sections of highway between junctions, later work included junctions, and the most recent work, by Parkin et al., has created a comprehensive model for the perception of risk for a whole journey. This models the acceptability of cycling based on perceived risk across the different components of a journey. The factors that influence the perception of risk include the volume, speed and composition of motor traffic, the number of parked vehicles in the highway along the route, and the types of junction and types of turn being made. Interestingly, the provision of facilities for cycle traffic on the highway (for example, cycle lanes approaching and through junctions) was found not to greatly influence the perception of risk. This may be because the presence of such facilities is alerting the cyclist to an assumed level of hazard that they may otherwise not have perceived. Conversely, it may simply be that such facilities within the highway have no value in altering the perceived level of hazard to which a cyclist is exposed.

One factor that may be supposed to encourage participation in recreational cycling is increased opportunity for traffic-free recreational cycling. There has been an increase in the number of traffic-free cycling routes, from the creation of technical forest trails to the restoration of disused railway lines and canal tow-paths for casual leisure riding. Local authorities, landowners (such as Forest Enterprise and British Waterways) and organisations that facilitate cycling such as Sustrans have all played a part in increasing leisure cycling routes and facilities. Planning authorities now recognise that the availability of good quality accessible open space for walking and cycling, linking home and work, potentially enables people to reduce their car use and also to carry out regular exercise as part of their daily routines. Traffic-free routes allow these journeys to take place in a more attractive and natural environment, without the stress of having to cope with motorised traffic.

Confirming these suppositions, Parkin found the only significant reduction in the perception of risk to be linked with cycling in traffic-free conditions. The significant value of segregated facilities has also been shown by others (Wardman, Hatfield and Page, 1997; Wardman et al., 2000). However, Parkin found that the majority of respondents found cycling to be acceptable based on perceived risk whether or not the route was traffic-free.

Stated preference-based discrete choice modelling research (Bovy and Bradley, 1985; Hopkinson and Wardman, 1996; Abraham et al., 2002; Stinson and Bhat, 2003) has shown time and safety to be the greatest determinants of a cyclist's route choice. These studies also show the preference of cyclists for off-road and quieter routes. There is scope for extending research into cyclist route choice to incorporate more detailed analysis of cycle facilities, variation by socio-economic classification, and other variables such as topography and weather. A preference for off-road cycling has also been found in cyclist mode choice modelling of stated preference data. For example, the model of Ortuzar, Iacobelli and Valeze (2000) shows that segregated

cycleways could produce increases in bicycle use of as much as 10 per cent mode share for certain sectors of Santiago.

The importance of facilities at the destination (for example, cycle parking, showers and changing facilities) is highlighted by both Wardman et al. (2000) and Ryley (2005) from mode choice stated preference experiments for journeys to work and education. Employers could therefore be encouraged to provide cyclists with facilities at workplaces, schools and colleges, although more work is recommended, in order to disentangle the relative impact of different facilities such as cycle parking and showers.

Route Characteristics

Jones (2001) summarises a range of complaints about poor quality cycle infrastructure that recurred across a series of seminars organised by the National Cycling Forum for practitioners and activists. Some complaints concerned design within the carriageway, for example cycle lanes that are too narrow for the kinematic (moving) envelope of a cyclist, and junction design that places cyclists in danger. But most of the criticisms were in connection with traffic free routes, and included:

- conflict with pedestrians on shared-use paths, particularly those that take space away from existing footways;
- lack of continuity of routes, resulting, for example, from 'give way' and 'cyclist dismount' signs;
- street furniture that creates obstacles;
- poor surfaces on off-road routes; and
- off-road paths that take inconvenient routes.

Hence, while traffic-free routes may reduce one of the negative influencing factors in connection with cycling, namely the perceived hazard from traffic, such provision also has the potential to introduce a series of other problems for the cyclist.

In respect of stops and starts, assuming a notional head wind, a cyclist with a power output of 75 watts would be able to travel only 80 per cent of the distance for the same total energy output on a flat route with six stops per kilometre as compared with a flat route with two stops per kilometre. Recognising the importance of hilliness due to its impact on the effort of cycling, it follows that a journey with frequent stops for a cyclist will have a commensurately high likelihood of reducing the propensity to cycle.

Rolling resistance is linked with the amount of effort required of a cyclist, and the perception of the state of the highway network surface could be linked with a reduced propensity to cycle. Testing this hypothesis, Parkin (2004) found that local authority scores for so-called 'best value' indicators for the proportion of highway in need of repair were significant in explaining the variation at ward level in the proportion of people cycling to work. Poor riding surfaces put people off cycling. Another aspect of rolling resistance is relevant; novice cyclists are less likely to understand the potentially significant detrimental effect of high rolling resistance, especially on the common entry-level bicycle configuration that has large crosssection knobbly tyres that may perhaps only infrequently be inflated to the correct pressure. Inappropriate tyres, incorrectly inflated, will have a negative impact on ride comfort and will make cycling feel like harder work than it ought to be. Bicycle promotion activities should therefore include guidance on bicycle purchase decision making and maintenance.

Discussion

This chapter has reviewed some of the more recent and relevant quantitative studies into cycling mode and route choice. The significance of both the effort of cycling and the perception of the environment through which the cyclist travels have been shown to be as important as more traditional concerns with time and distance. To conclude, we consider the implications of our analysis for two areas; first, future methodological developments in cycling studies, and second, future cycling promotion strategies.

Recommendations on Methodological Developments

Quantitative models are able to infer statistically significant weights on the different influencing factors on cycle mode and route choice, and have the important ability to forecast future changes. Qualitative and quasi-quantitative methods (simple ratings scores associated to qualitative responses) are often required as a precursor to the implementation of quantitative models and help determine the range of parameters that need to be analysed. As a stand-alone technique, qualitative analyses can also provide other useful insights that are not able to be tackled using quantitative models.

In attempting to evaluate the contribution of the wider transport environment on levels of cycling, a number of studies have concentrated particularly on perceptions of risk. But it is not completely clear the extent to which the presence of traffic is disliked because of the element of additional perceived risk, and the extent to which traffic adversely affects other features of journey ambience, such as noise and general attractiveness of a route.

Based on estimates of hilliness, it has been shown that expenditure of effort has a large impact on the volume of cycling for the journey to work. Extrapolating this major influence of effort, it becomes clear that other features of routes, such as road surface regularity and the number of stops required on a journey, are also very important to consider, as they too will have a large impact on the amount of effort required.

Cross-sectional aggregate statistical data (NRTE and NTS) have been shown to demonstrate mutually inconsistent trends. This is a direct consequence of the variation to be expected for counts of low numbers or proportions, and of shortcomings in what is counted as a bicycle trip. More emphasis therefore needs to be placed on collecting appropriate data sets in order to deduce trends using appropriate time series analysis techniques. Finally, more work is required to further develop theory and practice in modelling choice mechanisms, for two reasons. First, to fully and properly include attributes such as risk and effort. Second, to encompass some of the wider, more cultural, issues that may affect choice for the bicycle.

Lessons for Promoting Cycling

Hilliness has been shown to have a very significant effect on the proportion of people cycling the journey to work. While it is not feasible to eradicate hills, careful consideration should be given to the alignment of cycle routes in hilly areas, in order to reduce the negative consequences of topography. Similarly, it has been shown that both surface roughness and the number of stops and starts have a strong impact on the amount of effort required to cycle. Correspondingly, infrastructure should comprise direct routes, with few stops and starts, and have well maintained riding surfaces.

The perception of the risk of cycling on a road with motorised traffic is unaffected by the provision of cycle lanes along routes, and approaching and through junctions. The relative importance of the perception of risk and other environment features remains fully to be explored, but it is possible to say that important features of network design involve not just safety, but also effort and positive features such as attractiveness and comfort. It is also important to understand that perceptions of the risk and effort involved in cycling practices are unlikely to relate directly to actual levels of risk and effort. For example, a reduction in perceived risk without a commensurate reduction in actual risk might lead to exposure of a larger number of people to hazard.

Networks for cycle traffic should extend from significant trip attractors, such as town centres, at least to 2 km and as far as 5 km, as over these distances the flexibility and freedoms of the bicycle are evident without undue exertion. It cannot be assumed that use of the bicycle for leisure purposes will follow through into use for utilitarian purposes, but promotion of the bicycle for utilitarian trips should recognise that the market comprises principally car-owning households.

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Chapter 4

Hell is Other Cyclists: Rethinking Transport and Identity

David Skinner and Paul Rosen

Introduction

How do others view cyclists as they pass by? Anybody who rides a bicycle for practical everyday journeys in the UK and in much of the Developed World is assumed by others to have certain personal characteristics. At best, they are brave, fit and somewhat unconventional in taking on such a risk; at worst they are foolish, inconsiderate and even selfish in the hazard they are believed to pose to others. In a few locations, where cycling has a higher profile, bicycle users are more accepted; in others, where cycling on the road is rare, they are less well tolerated, and attitudes towards cycling can be hostile and even threatening. What might motivate somebody to cycle in such conditions? Perhaps it is a strong conviction of the health and environmental benefits of cycling, a rejection of car culture, or even, in some cases, a sense of moral superiority and self-control. Perhaps it is simply the convenience and practicality of cycling for the journeys they make. Whatever the case, both in the perceptions of 'others' and the understanding of self, questions of identity loom large in the social practices of cycling.

The concept of identity has become increasingly well-used in the social sciences in recent times, to the extent that it forms part of the core undergraduate curriculum (for example, see Woodward (ed.) 1997). The term encompasses both people's sense of who they are (what might be termed personal identity) and their sense of who they are like and who they are different from (what might be termed social location). This slippage between group and self can be analytically frustrating but also helps to explain the growing social and political popularity of the identity concept. A range of commentators have highlighted the significance of identity questions in the contemporary social setting (for example, see the papers in Hall and Du Gay (eds.) 1996). These analyses differ in their detail but all argue that questions of identity have come to the fore of both the personal and political realms (in some ways collapsing the very distinction between personal and political). The suggestion is that identities have become more important because they have become more problematic the 'liquid' (to use Bauman's term) character of contemporary social conditions forces the continuing reassertion and reappraisal of self, community and group.

This chapter shows how research on the thorny issue of how to support increased levels of cycle commuting has led us to see the value, despite its frustrations, of applying the concept of identity to the analysis of cycling as social practice. Our argument is that in order to comprehend people's experiences and understandings of cycling, we must ask how cycle users see themselves and their location in wider society. In what ways do they construct identities and how do these identities mediate their relationship with cycling, with bicycle equipment and accessories, and with other bicycle users? We also ask how cyclists are represented and imagined in public discourse. The apparently practical, concrete issue of cycle commuting is intractable, we argue, without the apparently esoteric notion of identity.

Cycling Policy and Identity

Policy-makers and green transport activists have been struggling to reverse a decline in 'utility' cycling, that is, day-to-day cycling for mundane trips to local shops, to work or to school. There has been a growing body of policy and advocacy work, backed up by research in the UK and other countries, calling for a greater role to be given to cycling as a means of improving people's health and well-being, cutting congestion and reducing the environmental impacts of motor transport (e.g. European Commission, 2000; Rosen, 2003). Various initiatives have appeared encouraging people to cycle to work and school. Cycle ownership remains high, and it is regularly reported that more cycles are sold in the UK each year than cars. As Parkin, Ryley and Jones report in their chapter in this book, a large proportion of journeys made are of a distance that is potentially amenable to cycle use. Yet we are also told that even since the 1980s the number of journeys made by bicycle and the average distance cycled per person have both fallen substantially, with rates far below those found in many other parts of Europe.

Against this falling use of bicycles, there has been an increase among both local and national transport policymakers though by no means all of them in incentive and will to support modal shift, that is, to reduce the use of the private car as the main mode of transport in favour of other modes including cycling. But there is also a growing awareness of how difficult it is to translate that will into substantial increases in cycle commuting. Moreover, even among those policymakers keen to bring about more cycling, the methods used to achieve this can be misguided. Considerable energy has gone into improving facilities for cyclists, building a cycling infrastructure and promoting the benefits of cycle use, but much of this has rested on largely untested assumptions about individuals' attitudes, needs and behaviour around transport. Investment in facilities and infrastructure is often underpinned by a belief that building new facilities will lead unproblematically to more cycling.

Such assumptions are generally accompanied by a somewhat limited analysis of the attitudes and behaviour of cyclists and potential cyclists that focuses on 'human factors' and so-called 'barriers' to cycling, concepts that can be hamstrung by a static, undifferentiated account of people's understandings and experiences. For example, danger on the roads is generally the most common reason cited in surveys of non-cyclists for why they do not cycle and of leisure cyclists for why they do not use their bicycles for utility trips (C-PAG 1997; AA 1993; Gardner 1998; see also Chapters 3 and 7 in this volume by Parkin, Ryley and Jones and Horton). However, existing utility cyclists who have experience of cycling in traffic have been found to find danger less of a threat than those who have no such experience (Joshi and Senior, 1998). Similarly, fear of accidents reduces with greater cycling experience (AA, 1993). There is a risk, then, of a concept such as 'barriers' to cycling conveying a notion that such barriers are fixed and obdurate. On the contrary, whilst there are factors that prevent individuals from cycling, these are fluid and vary according to somebody's personal circumstances: not just how experienced they are at cycling on the road but also their age, gender, employment situation, geographical location and so on.

In addition to the personal circumstances that affect people's modal choices, existing habits, assumptions and ways of doing things have an entrenched character that contributes to the difficulty of achieving significant modal shift. Such things have been shaped by a cultural shift towards car-dependence since the 1960s, and the accompanying development of an almost exclusively car-based approach to transport planning and infrastructure provision. People's decisions over which transport mode to use for a specific journey are not strictly individual choices, but are mediated by shared norms and expectations linked to these cultural and material changes. Car ownership and use, for example, are not simply about the practicalities of mobility but are inextricably linked to people's sense of who they are or who they wish to be. Cars are marketed to 'lifestyles' (Gartman 2004). Their appeal and use are entangled with notions of privacy (Urry, 2004) and self-expression (Miller ed. 2001). Behaviour around both cars and bicycles is mediated by national identity (Ebert, 2004; Edensor, 2004; Koshar, 2004) and group membership (Hebdidge, 1988). It is important, therefore, to deconstruct the rhetoric of decision-making about modal choice and consider how such decisions are made. Claims about an individual's or a local area's transport 'needs', and the relationship between needs, choices and other aspects of people's lives should not be taken at face value.

What is required is a more sophisticated analysis of actual and potential travel behaviour. Such an analysis should move the focus from the circumstances and choices of an archetypal individual towards an understanding of the varied conditions in which differently-placed people negotiate transport problems and choices. It should also recognise that transport behaviours are part of broader constellations of attitudes and practices. To analyse this fully, it is helpful to deploy the concept of identity: this term enables us to think about the relationship between the individual and their social context. The notion of identity can help us move beyond a 'rational choice' model of transport behaviour posited on an abstract universal individual, and replace it with an account of the differences in perspective and action that emerge from cultural variations between social groups. This should help us better appreciate the dynamics and difficulties of modal shift and hence imagine more credible ways of achieving this.

Understanding Transport and Identity

Analysis of people's motivations, behaviour and experiences in relation to their commuter choices can reveal much about the potential for wider changes in transport behaviour. In this respect, it is important to understand not just the barriers to cycling but also the motivations for cycling, which groups of people are most or least likely to cycle for different types of journeys and under which circumstances such changes in practice are likely to be feasible. Davies et al. (2001) draw on extensive data from surveys of a broad population sample (cyclists and non-cyclists) to develop a segmentation of the market for cycling which does just this: it identifies nine different social groups with different degrees of sympathy towards cycling, and highlights how likely and in what circumstances the different groups are to be amenable to cycling.

Whilst there are elements of identity within this segmentation specifically to do with age, gender and attitudes towards technology and the cultural acceptability of different modes an alternative way of approaching this topic takes identity as intrinsic to people's transport choices. One might think of three different models to consider the relationship between transport and identity.

Model One: Identities pre-exist and shape transport experience and behaviour; that is, cyclists come from particular social backgrounds and/or social backgrounds influence how and why people cycle.

Model Two: Transport experience and behaviour shape identity; that is, cyclists come to share a common outlook and interests through the experience and conditions of cycling.

Model Three: Transport and identity are caught up in a circular process in which social and self-identities both influence and are influenced by transport behaviour and experience.

The features of these three models can be seen in different aspects of contemporary transport policy and practice. Model One, for example, is embedded in many assumptions about how social class, gender, ethnicity and so on affect our transport choices, even though detailed research (as described in Chapter 3 in this volume) can often prove these assumptions wrong. Model Two is perhaps best epitomised in the way contemporary transport politics plays out periodically in public discourse and everyday life. For example, whilst the notion of a coherent body of 'motorists' sharing common needs, wants and identities has proved unable to sustain itself over time, the fuel tax protests across much of Europe during autumn 2000 showed that an angry constituency of drivers with a common goal could be sufficiently effective as a political construct to affect government policy well beyond the life of the protests themselves (Rosen, 2002b). Equally, the polarised identities of 'cyclists' on the one hand and 'motorists' on the other frequently erupt into public conflict, albeit usually in print rather than in person, as shown in the chapters by Fincham and Horton in this volume. Such conflicts typically centre on specific types of cyclist, notably couriers and city cycling activists, who can clearly be seen as sharing a common set of interests and associations, with cycling an important feature of their lives and personal narratives (see also Horton, 2006).

But what about the mass of ordinary cycle users: are they too part of some clearlydefined category of 'cyclists'? This chapter draws on research data on work-related travel choices in order to explore this question. In doing so, it problematises some common assumptions about transport-mediated identities. In particular it highlights the tensions that transport activists and policymakers need to address if they are to have any hope of transforming the 'sociotechnology' (Rosen, 2002a) of transport and mobility into something more in line with current policies for sustainability.

Thenext section briefly outlines our empirical research. We then go on to consider the relationship between cycling and identity, discussing both the ways in which cycling attitudes and behaviours emerge out of people's social location (Model One above) and the role played by the experience of cycling in shaping identities (Model Two). The chapter explores these topics in detail by considering cyclists' accounts of themselves in relation to colleagues and other road users. The chapter concludes by exploring the wider implications of our study for understanding mobility and identity (Model Three).

Research Background

These findings were generated as part of a UK Government-funded research project¹ that studied the ways in which an individual's decisions about whether or not to cycle to work are affected by the organisational dynamics of their workplace. The research was carried out among employees at five organisations in Cambridgeshire, and was designed in partnership with the Cambridge Cycle-Friendly Employers' scheme (CFE).² The objective was to learn about the differences that occur - in cycling levels, in attitudes towards cycling and in organisational characteristics - between employers that had joined the CFE scheme and were thus publicly supporting staff who chose to cycle to work, and those where such support, if available at all, was less public. About 100 people were interviewed altogether, all of whom had to own a bicycle as a condition of being included this meant that all our respondents were in principle in a position to make the decision to cycle to work without taking the first step of cycle purchase. A fifth of our respondents were interviewed in focus groups and the rest individually. A few staff at some of the firms were interviewed again around a year later to trace any changes that had taken place, either personally or organisationally.

The organisations were all based in and around Cambridge, an area with exceptionally high levels of bicycle commuting.³ One company was situated in a

¹ The project was titled 'Workplace Cycling Cultures, Modal Shift and Bicycle Design: Implications for Individual and Organisational Practices'. It was carried out during 1999 2002 and funded by the ESRC under the Inland Surface Transport LINK programme, project number L131251006-A.

² This scheme has since been subsumed within the broader Cambridge Travel for Work Partnership.

³ The Cambridgeshire Local Transport Plan 2006 1 1 (Cambridgeshire County Council, 2006) states that cycle to work figures in Cambridge stand at 28 per cent. This compares with cycling figures of less than 2 per cent of all journeys nationally.

village six miles from the city, whilst another had offices spread right across East Anglia; we interviewed their staff at offices located at a village four miles outside Cambridge and in two other towns further afield, in order to compare the experiences of cycling to work in different urban settings. The other organisations were all within a few miles of Cambridge city centre. The sectors represented are not untypical of Cambridge industry – two are technology and management consulting firms employing a large number of specialist high-tech engineers; one is an Internet firm employing many hardware and software engineers but also a large sales force; another is a utility firm based on more traditional engineering, but again with many sales and admin staff; and the fifth is an environmental non-governmental organisation which is the UK branch of an international environmental network.

There are some striking differences in the size and structure of these organisations, in the distribution of responsibilities and lines of authority, in the degree of formality within the workplace, and in the experience of organisational change. With regard to the latter issue, some organisations had experienced significant changes of ownership or organisational restructuring in the recent past. These differences all have an impact on the kind of workplace transport culture that exists within a firm, which in turn helps to shape though not exclusively the transport identities held by different individuals and groups.

Workplace Cycling Identities

Workplace identities are strongly shaped by where people are located within an organisation, with individuals often holding multiple identities that match their different professional roles. These can include people's formal professional roles, their location within a particular department, their level of seniority or length of service, and their membership of groupings such as professional associations or trade unions (Mclaughlin and Webster, 1998; Mclaughlin et al., 1999). Organisational values and practices also have an important role here, although this depends on how integrated an individual is within the organisation. Overall, the combination of organisational identities held by any individual mediates how they interact with the sociotechnologies that shape their experience of work, including the sociotechnology of work-related mobility.

We were particularly interested in this research in what it is about working in particular companies that either encourages or discourages cycle commuting. Important factors include such things as the company's location and where staff tend to live, the kinds of facilities provided for both cyclists and car drivers at the workplace, and company expectations of staff such as how they should dress and whether they need to be able to travel during their working day. On top of these practicalities, other factors have considerable impact on how robust the cycling culture of an organisation is. Most notable of these are firstly organisational structures such as the way different parts of the organisation work and interact with each other, and how organisational decision making is managed. We found in our research that a healthy and robust 'workplace cycling culture' one where cycling to work could be seen as an option built into the structure of the organisation and not just a choice made by specific individuals when it suited them was strongly linked to stable, flat and open organisational set-ups. Secondly, the different cultures and values held within the organisation also play an important role not just the obvious one of a commitment to sustainable transport, but also wider values to do with the environment, staff welfare and the local community. Such values are typically embodied or made material within the organisation through such things as involvement in the Cycle-Friendly Employers Scheme. Most importantly, identities and cultures in the workplace are framed not by any of these factors individually but by the ways in which the practical and cultural conditions of the workplace interact with the varied outlooks and experiences of organisational members.

A prominent issue in our interview data was modal choice, that is, which mode of transport people choose to take to work, and in particular what factors contribute to decisions to commute or not by bicycle. Interviewing people about modal choice in the context of their broader experiences and attitudes produces a more complex picture of the constraints and motivations that affect cycling than is usually recognised in the literature. Frequently-discussed 'barriers' to cycling (for example, distance travelled, perceptions of safety, hilliness and poor weather) or 'motivators' for cycling (such as keeping fit, cost savings and convenience) do crop up in our data. However, our analysis shows that over and above such factors, individual transport choices are enmeshed within a complex inter-linking of individual, domestic and work-based assumptions, obligations and priorities.

What is most striking is that cycling and other transport behaviour can be influenced by a wide range of factors, encompassing personal circumstances (for example, home and work locations, domestic responsibilities, access to other forms of transport), the technical capacity of the bicycle relative to those personal circumstances (for example distance and suitability of route, the requirement to carry equipment regarded as essential) and as will be discussed in greater detail below people's experience of work. None of these factors operates in isolation from the others; they are best understood as dynamic constellations that inter-play and develop over time.

At this point it is worth reintroducing the notion of identity to make sense of not only the complexity of individual transport choices but also the ways in which those choices are culturally mediated. One important aspect of this is that transport behaviour and outlook vary by social location. For example, our research revealed important differences between men and women in cycling behaviour. More than this, notions of masculinity and femininity featured heavily in attempts to discuss cycling in general. The research generated little of the kind of data one might expect about masculinity and people's choice of car, or masculinity and speed, but it did throw up some interesting findings concerning the relationship men and women have to technology and to each other in relation to technology. In discussing their bicycles, men generally display a hands-on, comfortable relationship to technology

they will often do their own repairs, and if not they will say this is because of time constraints rather than lack of technical skill. Some will have rigged up their own lighting or load-carrying systems. Most interestingly, male respondents who do not raise safety as an especially important issue for themselves will often express concerns about the safety of their wives or daughters they will say things like

'I wouldn't want my wife to cycle on that road.' And women's own perspectives help pacify men's concerns since they are more likely to prefer the relative safety of segregated cycle paths to the dangers associated with sharing the road with cars. In contrast, men are more divided over which of these options they prefer. Women also, almost universally, will get repairs done by a man their husband, their son or a professional cycle repairer (who is most likely to be male despite small inroads by women within the cycle industry). So, as much work on gender and technology has found over the years, in this research women's relationship to technology is shown to be less direct than men's, and it is frequently mediated by men in ways that make it far less likely that a woman's identity will include being comfortable with technology.

Another illustration of the ways in which cycling behaviours connect with social identities is our finding that, for some of our interviewees, cycling is linked to occupation. A large proportion of our interviewees were engineers of some sort, and we found that engineers (both software and hardware) who cycle to work regard their professional identity as inherently cycle-friendly. They present themselves as the kind of people who rationally weigh up the options in order to arrive at the best solution. When one has to commute a few miles to work in a congested city, the best solution is often to cycle. This engineering identity goes further, too, to include a kind of mind-set that is individualist and ahead of everybody else. As one senior engineer in his late 30s put it:

A lot of the people who cycle are people who just get on with it, in general in their engineering work as well. I guess there maybe is a certain amount of going against the trend, so you need a certain amount of stubbornness to do it.

Note that in this quotation we see an interesting blend of perceived personal and occupational characteristics used to explain transport behaviour. What is also evident here is that cycling is not merely an outcome of identity formation but can become a building block of self- and social identification in its own right.

Transport Discourses

It is to this last issue that we now turn: the way transport modes themselves come to form part of people's identities. A problem to resolve here is that when identification with a specific mode of transport is discussed, it is often in too simplistic and deterministic a fashion. This difficulty can be seen in the academic realm of transport research, in transport politics and also in representations of transport in the media. Cycling campaigners and policymakers, media personalities ranting against cyclists in the press and even the authors in this book (ourselves included) routinely identify people who use bicycles as 'cyclists' and people who use cars as 'motorists', even though most of us do both of these things and are therefore not uniquely attached to any single mode of transport.

Nevertheless, whilst since the 1990s arguments for sustainable transport have gained more prominence and also more mainstream credibility, one response to this has been a backlash across much of public and political discourse, opposing policies designed to promote modal shift. A central theme of the backlash has been the expression of a cultural, and in many cases individual, love of the car in the face of policies for car restraint. Opinions vary among those expressing these views as to how transport problems should be solved, but comments about the importance of the car to our culture, to the economy and above all to individual freedom come through again and again (Rosen, 2002b).

This response is captured especially in a new phrase that began to appear in discussions about transport policy not long after the 'New Labour' government was elected in Britain in 1997 the phrase 'anti-car'. This phrase is mostly used in just two contexts either as an accusation or as a denial. Advocates of the car accuse those who they regard as their opponents of being anti-car; whilst advocates of car restraint, or of integrated transport, qualify their position as being something other than anti-car (ibid.; Dunn, 1998; Williams, 2000).

Whilst the 'anti-car' rhetoric has proved highly effective in political debate, how well does this label describe the people it is aimed at environmentalists, the left and advocates for and providers of alternative transport modes? Is the world of transport politics really divided between under-threat motorists and 'anti-car' cyclists? On the contrary, our research shows that such distinctions mask the actual ways in which transport choices are expressed in people's sense of who they are.

Few of our respondents who, as was pointed out earlier, all owned a bicycle did not also own a car. This fits with broader patterns in the UK, where bicycle ownership is high even though bicycle usage is not. It also supports both the point made by Parkin et al. (this volume) that cycle use is more common among car owning households than non-car owning ones, and also research by the British Automobile Association which found that almost a third of its members were cyclists as well as motorists (AA, 1993). Our findings suggest that most bicycle users make their transport decisions pragmatically, based on a combination of convenience, personal preference and both domestic and workplace constraints.

In other words, there is little evidence to support the polarisation between motorists and cyclists that is portrayed in both the pro-car discourse common in much media and political discussion, and in some parts of the environmental movement. Identity is far messier than this, and our research shows that in the case of transportmediated identities, these are fluid and multiple, and far more inclusive than seems to be generally believed. Somebody can be both a motorist and a cyclist without this giving them an identity crisis. A quotation that illustrates this point came from a focus group held in an IT firm:

One of the things I've noticed since I both cycle and drive, I hope that makes me a more considerate driver, and also a more careful cyclist. It also has to be said that in this city there are some crazy cyclists as well as crazy drivers.

For most people, their transport choices permeate their identities not in the sense of them being 'a cyclist' or 'a motorist' to the exclusion of other options; rather, transport informs identity through its interaction with other aspects of people's lives, such as the professional and gendered identities discussed earlier.

Hell is Other Cyclists

We have argued that identity (in both a personal and a social sense) is an important dimension of transport behaviour. What is required however is a more sophisticated account of the interplay of identity and transport than simply treating car or cycle use in themselves as a sufficient basis for identification, however common this is in popular discourse. The inadequacy of such an approach emerged in a compelling and unexpected way during our interviews. A recurring feature of both the group and individual interviews we conducted was the fact that, unprompted, cycle users would routinely criticise other cyclists. Far from seeing themselves as in conflict with 'the motorist', as car advocates might assume, the identity of people who commute by bicycle tends to involve them setting themselves apart more from *other cyclists*. This is the case even for those who are actively promoting cycle commuting within their workplace.

Cycle commuters may in fact resist altogether an identity as 'a cyclist', especially when their choice to cycle is rooted in a variety of values not intrinsically linked to cycling such as the pragmatic approach to decision making that informs engineers' identities. To the extent that cycling is an element of somebody's identity, we found this to be nevertheless constrained within a set of boundaries that exclude the negative aspects of cycling. In particular, these boundaries help to distinguish safe and responsible cycling from dangerous, irresponsible behaviour, particular in relation to the latter's scope for giving all cyclists a bad reputation; and the boundaries specify how well individuals are believed to be able to understand and identify with the perceptions of other road users. These boundaries are set out in Table 4.1.

	Safety/Responsibility	Image promoted of cyclists	Degree of understanding
Other cyclists	Dangerous and irresponsible	Bad image	Don't understand drivers' perspective
Other drivers	Often drive dangerously	n/a	Don't understand cyclists' perspective
Self/colleagues	Safe and responsible cyclists and drivers	Good image	Understand both sides

Table 4	.1	How cycle	commuters	see themse	lves and	other road	users
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As the table shows, our respondents define themselves as distinct from other road users, both cyclists and drivers. *Other cyclists*, it is claimed, often cycle at night without lights, they move around on the road unpredictably and without indicating, they ride the wrong way up one-way streets and because of this they give all cyclists a bad name. The following quotation conveys much of this sense of annoyance at other cyclists' irresponsibility, and the effects it can have:

Hell is Other Cyclists

Q: Are there any issues you think are centrally important for cycling?

A: Safety obviously is the key one really. It's good to be environmentally friendly but not to die as a result of it. The attitude of car drivers towards cyclists isn't good. I think a lot of cyclists do harm to themselves. Cycling home in the evening half the bikes I see don't have any lights on. Because there's a cycle route they think they can get away with it. As a car driver, when I see cyclists going through red lights and so on it annoys me, but I'm also a cyclist (Male senior engineer, late 20s).

Other drivers also are felt often to drive dangerously, through a combination of carelessness, aggression and most importantly through not understanding well enough the perspective of cyclists how much space cyclists need, how fast they are travelling and how safe it is to overtake them in particular circumstances. Again, here is a quotation that sums this point up:

Q: Is there anything I haven't brought up that you feel is missing?

A: Yes perhaps the attitude of other road users to cyclists. Most drivers are careful to for instance overtake a cycle at a good distance, but there are perhaps three classes of drivers who are not. There are the 'wallies', as I call them, who treat it as an exercise in their driving skills to show how closely they can overtake you without hitting you. There are the people who when they see oncoming traffic suddenly think you get a lot thinner and they can overtake you closer than they would normally. And there are people who don't notice you and shouldn't be driving anyway (Male consultant engineer, early 40s).

In contrast, our respondents portray *themselves and their colleagues* as people who generally both cycle and drive safely and responsibly though they often admit they sometimes make mistakes and who have a balanced understanding of both cyclists' and motorists' perspectives. This comes across from an exchange that took place in a focus group between two female research assistants in their 20s.

E: I'd like to think it makes you more aware of what's around you, and perhaps a better car driver too. You think about cyclists more, and I think that pedestrians always hate cyclists because they are cycling, and car drivers hate cyclists because they are cyclists. And if you are a cyclist you hate cars and pedestrians.

J: I find I get annoyed with cyclists when I'm in the car, when they do things that I wouldn't do. I'm not the safest cyclist, I've been cycling in Cambridge for so long that I know what my bike can do, so I wouldn't say I was completely risk free. But when you are coming down a road that can barely fit two cars, and all the cyclists [...] will cycle down the middle, two abreast, and I'm trying to get down it with my car, I'm just like 'hello, what are you doing?' When they break the rules, I think that annoys me, because I am a cyclist. Even if it was like that, I wouldn't go quite that far, because that's getting to taking it to the extremes really.

These respondents see themselves, then, as clearly distinct from both irresponsible cyclists and dangerous motorists. Safe and responsible actions, and an ability to see the other road user's point of view, are integral to their identity as cyclists, and this distinguishes them from many others they encounter on the roads. It is notable that

in another focus group, one company's Cycle Co-ordinator that is, the person who represented the company in the Cycle-Friendly Employers' Scheme included all her colleagues on her own side of this divide:

the people at [her company] are quite good at lighting, it's all the other people who don't (Female information officer, 30s).

It is important to point out that these respondents cover a range of demographic variables and transport perspectives. When interviewing people who cycle to work, attitudes towards other road users do not seem to vary between women and men, between different kinds of industry or different professional or career positions. Most importantly, harsh judgements of other cyclists are made not just by those for whom cycling is an occasional or pragmatic option, but also by cycling advocates such as the Cycle Co-ordinator quoted above, who has taken on a voluntary role within her company to promote cycle commuting. Such judgements are just as common among staff from an environmental consultancy, where cycling to work is seen as integral to the company's wider philosophy, as they are in an engineering firm where the company meets cyclists' needs out of pragmatic rather than ideological objectives, that is, to retain staff and help overcome car parking shortages.

Conclusion: Identity, Mobility and Policy

As the discussion of attitudes towards 'other' cyclists suggests, identity is an important facet of how people make sense of their own mobility choices and behaviour. The ways in which notions of self and of sameness and difference feature in this is, however, more complex than any simple notion of a unitary cycling identity would suggest. What is required is an account of identity and mobility that is:

- multi-facetted and contingent, that is, never just about cycling or simply determined by social location;
- a process rather than a fixed, finished state. This process involves the continuing interplay of individuals' social location and personal transport experience with the policy context that frames their choices. It can never be reduced to just one or other of these;
- 3) informed by wider representations of transport users' attitudes and practices, but founded upon a far messier reality.

This might seem like an argument for endless complexity but there are some patterns onto which we can build analysis and policy. Two of these we wish to focus on are firstly the importance of local contexts as arenas for the construction and articulation of transport identities and secondly the rhetoric of self and society that permeates apparently disparate choices and stances on transport.

To begin with local context, our study shows how conditions in the workplace can play an important role in shaping mobility. The workplace is a site for the expression, construction and articulation of identities, including transport-related identities. More than this, though, the structures and cultures of workplaces themselves express particular organisational identities that in turn affect the modal choices of organisational members. Understanding the cultural dimension of organisations should help attempts to facilitate change, especially in organisations that are structurally less amenable to supporting a robust cycling culture (the majority of organisations!).

However, whilst the local contexts in which identity is developed and expressed should not be overlooked, we should also consider the ways in which, across apparently distinct and contradictory positions and contexts, we can see elements of a common understanding of the relationship between self and society. The insistence on discussing the 'hell' of 'other' cyclists (rather like the driver 'under threat') is an expression of a dominant worldview of the good, responsible self struggling against a bad society.

It is in these two areas that we can see the potential for promoting modal shift, even if they also show us why that shift is so hard to achieve. If commuting behaviour is, in part, mediated by the existing practices and values of the organisation, significant modal shift from employees is likely to require some sort of rearticulation of that organisation. Similarly, attempts to enrol people into modal shift will have to engage with contemporary values of self which are expressed through notions of individual autonomy and expression, but can also provide a powerful impetus to demonstrate that one is a responsible person in control of one's own life. This may also require convincing people that 'other' cyclists do not have to be 'hell' something that from our research could prove both a challenge but also a source of optimism given the multiplicity of transport modes that have a place in the identities of many people.

Those who only ever travel by car present a different challenge to those wanting to bring about more sustainable forms of transport and mobility. How can this kind of analysis contribute towards changing not just transport policy but also transport identities and practices? A first answer lies in the need to include identity within our conception of what constitutes the sociotechnology of transport. Reducing car-dependence is not just a case of providing better public transport and cycling facilities, improving cycling infrastructure or the design of bicycles. It also requires the much harder job of unpicking the ways in which cars far more than bicycles and other modes of transport form part of the identities of individuals, or ganisations and indeed the wider culture.

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Chapter 5

The Flaneur on Wheels?

Nicholas Oddy

To the sociologist or cultural historian, cycling history offers a particularly rewarding research area. It provides one of the earliest and most well documented examples of a modern, technologically demanding consumer good with a reach across age, gender and status. Moreover, it is in cycling that can first be seen many of the issues that would be later played out in motoring. However, even sociological studies of cycling have been affected by 'traditional' cycling history's privileging of technological development and/or significant type forms, with resulting dark ages which have merited little attention.

One of the most obvious of these dark ages is the early twentieth century. Typically, cycling history pays attention to the 1890s, before stepping swiftly forward into the inter-war period, mass cycling and the rise of the lightweight machine. It is reasonable to propose that this is a consequence of the technologically determinist and machine orientated approach that dominates much of the writing; once the archetypal roadster has become established as the definitive cycle it is uninteresting until its supremacy is challenged by another type form. However, even in more socially based studies, such as McGurn's *On Your Bicycle* (1987), the same pattern emerges, with only ten (out of nearly 200) pages being given to the 20 years between 1900 and 1920.¹

Does, then, this period deserve deeper study? Is it merely a time of 'treading water' with middle class cycling in decline, working class cycling not properly established, the machines themselves uninteresting, and all threatened by the lapping waves of the motor car and motor cycle? Or, is it a period of deeper significance in cycling history that has been ignored by circumstance rather than reason?

To understand the basis of these questions it is necessary to consider the nature of cycling history as it has developed in the twentieth century. Indeed, it would be wrong to think of this history as being a product of the twentieth century alone. Since the velocipede craze of the late 1860s, commentators have been keen to explore the history of the activity and particularly of the machine, realising that it had precedents dating back some half a century earlier.² It is the machine itself that was the focus

¹ Compare pages 130 141, covering these years, to pages 86 130 covering the 1890s and pages 142 161 for 1920 39.

² The velocipede was a front driven, compression wheeled machine invented in France that began to reach a broad public in 1867 68, it was superseded by the wire spoked tension wheeled high bicycle in 1870 71 and was quickly termed the 'boneshaker' in comparison. Its precedents were, namely, the Draisienne and the more advanced 'hobby horse' (for an excellent history of this period in Britain, see Street, 1998).

Cycling and Society

of attention of these early writers: 'who invented what?' and 'when?' became key questions. Typical of the genre is James Bottomley-Firth's *The Velocipede – Its past, its present and its future* (1869).

Representations of cycling's linear technological development expand in the early to mid-twentieth century. *Bartleet's Bicycle Book* of 1931 is probably the first 'modern' history of cycling written from the point of view of a collector and enthusiast (see Bartleet, 1983 [1931]). It is written in the form of a photographically illustrated catalogue resume of H.J. 'Sammy' Bartleet's own collection of historic cycling material, together with some supporting thematic chapters. Although clumsily put together by today's standards, it set the pattern for the nature of the content of many future publications and is a model that is still popular in much more polished form.³ This is a photographically illustrated technological history, but one interspersed with social commentary; however, it still belongs to a linear technological changes are the focus of study, and cycling as an activity is seen in the wake of those changes.

Linear technological histories have, since the mid-1980s, come under increasing pressure from academic analyses in social construction of technology (SCOT) emanating from Trevor Pinch and Wiebe Bijker's seminal article in *Social Studies in Science* (Pinch and Bijker 1984, 399-441). Here, technological change is seen very much in the context of social factors, rather than those of engineering. However, such approaches still focus on technological *change*: tellingly Pinch and Bijker's study of cycles (like Bijker's own later publications) concludes with 'closure' of the bicycle form in c.1892. In fact, for the period that is the focus of this chapter closure' seems to be a key factor.

In the SCOT model, closure occurs when a single type form becomes accepted by makers, users and the wider public as definitive and the possibilities for alternative designs are therefore closed down, a position subject to scrutiny by Cox and Van De Walle elsewhere in this volume. Pinch and Bijker propose that, to most people in 1880, the word 'bicycle' meant the high 'ordinary' machine as closure had been achieved round this type form. But, the type form was not entirely satisfactory, being off-putting or even 'dangerous' to the nervous, and it was also gender specific. These 'deficiencies' encouraged bicycle makers to continually and quite reasonably attempt to improve upon the 'ordinary'. By the late 1880s the design form had reopened with the development of both numerous 'improved' geared front driven machines, and the chain transmission rear driven 'safety'. At this time, therefore, bicycle design was open and the word 'bicycle' would merely define any foot propelled vehicle with two wheels, given that there were numerous competing types of bicycle in the market, each with their supporters jockeying for dominance.

However, the adaptable nature of the rear driven 'safety', particularly its suitability for pneumatic tyres, pushed it to the fore. By the close of the 1891 92 season it seems that every maker had stopped manufacture of the high 'ordinary', (which was soon disparagingly dubbed 'penny farthing'), while other bicycle types

³ The illustrated collection can be seen in The Museum of British Road Transport in Coventry, unfortunately heavily and inexpertly 'restored'. Bartleet (1983) [1931]) can be compared to Dodge (1996) which develops the form into a state-of-the-art publication.

had been reduced to curiosities. Even rear driven safety machines became defined round a single frame pattern, the 'diamond' frame, which could have its top tube 'dropped' to accommodate skirts and therefore was easily adaptable for use within the clothing conventions of both genders. Closure round the diamond frame was remarkably powerful and from the mid-1890s attempts to offer alternatives to it were met with increasing market resistance. Bicycle design of the period that is the focus here is characterised by its extraordinary stability, with technological change often being unnoticeable except on close inspection. Not surprisingly these decades seem rather dull and uninspiring to those who like progressive and visually exciting design development.⁴

Furthermore, cycling history has had its own culture to contend with. Many writers seem to have held strong beliefs about the nature of cycling and downplay those aspects of it that they do not like. Much mid-twentieth century writing was written from a position which saw the bicycle as part of mass transport and working class leisure culture. From this perspective, the bicycle's earlier roles as a status symbol and upper/middle class plaything are treated with incredulity, or just ignored.

The subject of this chapter, then, seems to be a victim of circumstance. Cycling enters the new century in the wake of the 'bicycle boom' of 1894 97, when the activity was at the height of fashion, the market was characterised by the monied classes buying top-grade machines and the industry was bloated by huge speculation by capitalists eager to profit from the potential it offered.⁵ A generation later cycling is the poor man's transport, the activity is ignored by the wider public, and the industry is characterised by concentrated manufacture of low-grade machines. Surely there is something more significant in the intervening years than most histories suggest? In such a situation a different approach to cycling history might usefully be employed.

In his book, *The Ride to Modernity: The Bicycle in Canada 1869-1900* (2001), Glen Norcliffe provides a possible model.⁶ Norcliffe, a geographer, looks to a source

6 While weather conditions in Canada were somewhat different from those in more temperate climates, Norcliffe's analysis demonstrates that the social context of the boom

⁴ The complexities of the concept of 'closure' in the SCOT sense are explored more deeply in Bijker (1995). The pattern of machine so referred to is the diamond framed c28 inch wheel rear driven 'roadster' and its open framed 'ladies' counterparts.

⁵ The bicycle boom followed in the wake of the successful development of the (expensive) pneumatic tyred rear driven safety bicycle that could be successfully ridden by both sexes without compromising existing dress codes. Coinciding with significant social changes and benefiting from advanced industrial practice, modern publicity and advertising, cycling enjoyed an unprecedented fashionable craze, conspicuously led by aristocrats, celebrities and the extremely wealthy in most industrialised nations. Machines cost from about £10 for the lowest quality to £30 or more for the most deluxe; a 'good' machine was typically about £20. Speculation and confidence in the permanence of the market conditions of the mid-1890s was burst by a collapse in sales during 1897, after which large numbers of manufacturers faced bankruptcy and the US industry was irreparably damaged. Those manufacturers that survived tended to reduce prices, typically by about 33 per cent – 50 per cent, and became more reliant on 'popular' models at the lowest end of the price range. Nevertheless, even in the early 1900s makers and commentators tended to assume that cycling was still a socially elite activity. The bicycle boom is extensively covered in most histories.

Cycling and Society

entirely unfamiliar to cycling history, but one cited often in the realms of the arts and by sociologists interested in the birth of modern consumer culture, the poet and writer Charles Baudelaire. Quite apart from the leap over disciplinary boundaries that this represents, Norcliffe's choice is even more challenging to the strictly linear and chronological 'tradition' of cycling history because Baudelaire died in 1867, ironically just as the velocipede was coming to public attention, and the essay that Norcliffe uses, Baudelaire's The Painter of Modern Life, was published in 1863, possibly before the velocipede bicycle was even invented.7 Whatever the conceptual hurdle that this might represent, Norcliffe (2001, 243–246) proposes the concept of 'the flaneur on wheels', arguing that 'Baudelaire's celebrated flaneur reappeared in the closing years of the [nineteenth] century, but this time riding upon a bicycle' (2001, 32). Baudelaire introduced the idea of the flaneur as a character type an informed observer of the passing urban scene, who fitted into it and relished it, but who viewed it apart, almost as an art form. Baudelaire's use of the term 'flaneur' was not new, but previously it had been used in a mainly derogatory way to describe the leisured and largely idle moneyed stroller who, in Britain, would be associated with dandyism. To cycling history, this in itself is pertinent because the dandy and the primitive bicycles of 1819 seem to have been inextricably linked to the point that the 'hobby horse' bicycle introduced to London by Denis Johnson in 1819 was often termed 'the dandy horse' (Street, 1998); however, Baudelaire's flaneur is a much less conspicuous and more intellectual individual.8

Norcliffe's premise is based on the idea that the flaneur was 'both watching and being watched' and therefore the 'boom' cyclists of the 1890s fulfilled this role by cycling in the urban space and indeed the countryside beyond it. The idea at first sounds preposterous to those familiar with the bicycle boom in urban Europe or the USA, and with the flaneur of *The Painter of Modern Life*. Surely Baudelaire's flaneur was a critical observer, visible but unnoticed, contemplating the trappings of urban modernity but without partaking in them? 'A prince who everywhere rejoices in his incognito ... Out he goes and watches the river of life flow past him in all its splendour and majesty ... He is looking for that quality you must allow me to

8 The concept of the flaneur was made significant to modern academia largely through the writing of Walter Benjamin, whose unfinished 'arcades project' was a pioneering study of the development of modernity and consumerism. 'Arcades' referred to the shopping arcades of pre-Haussmann, Second Empire Paris in which the stroller could perambulate and in which, Benjamin argued, modern patterns of shopping and consumption developed. 'Before Haussmann wide pavements were rare and the narrow ones offered little protection from vehicles' (Benjamin, 1973, 36; and for a full discussion see Chapter 2, 'The Flaneur'). Since then the flaneur has had increasingly varied reinterpretations, 'one "seen" chronology of (his) labyrinthine route is the journey from Baudelaire through Surrealism to the Situationist International' (Jenks (1995, 153). However, for the purposes of this essay, the flaneur is taken to be that of c1900, before Surrealism and more akin to the figure proposed by Baudelaire. For a varied range of discourse on 'flanerie', see Tester (1994).

years there was not dissimilar (see Norcliffe, 2001, Chapter 6).

⁷ There is some debate as to the date of invention of the velocipede bicycle. Most sources claim c1861, but this is now largely discredited and 1863 64 seems more likely. A full argument can be found in Herlihy (2004: 74–130).

call "modernity" (Baudelaire 1995, 9, 10, 12). Far from this, the boom cyclist was prominently mounted upon a machine that was the very embodiment of consumer luxurv and display and therefore an active participant therein; moreover, at a time of unprecedented public interest in the activity they indulged in, many boom cyclists were out to impress, to be seen rather than to be seeing. For most boom period urban cyclists, what critical observation of the type proposed by Baudelaire there might have been seems mainly to have been little more than visually assessing other cyclists for the 'cut of their cloth', as one might a casual acquaintance.9 The boom cyclist, therefore, was more a stick being carried along by the river of life, than an observer on the banks of it. His, and equally often her, high profile made the cyclist an object of curiosity, humour, admiration, hatred; but, whatever, this was no time for the cyclist to 'rejoice in his incognito'. The prominence of cycling during the 1890s is reflected in the amount of space it is given in almost every cycling history. The part played by cycling in the development of modern consumerism is equally reflected in the negative tone of the writing of largely left-wing twentieth century writers when discussing the society craze of the mid-1890s that gave the activity much of its status. However, rather than the whole concept being unsound, perhaps Norcliffe has chosen the wrong period for his flaneur on wheels? Norcliffe concludes his book 'By 1900 the bicycle no longer distinguished its owner as a pioneer of things modern. The boom was over' (Norcliffe 2001, 256). But, to what extent can the bicycle boom and its participants be given this lofty position, any more than the previous fashionable crazes for bicycles in 1819 and the late 1860s? Could it be that the bicycle's pioneering modernity is something more subtle that should be looked for elsewhere?

This chapter suggests that the correct context for Norcliffe's flaneur and his quest 'for that quality you must allow me to call 'modernity'' (Baudelaire 1995, 12) might be found in the period after the boom, but before the rise of mass working class cycling epitomised in production terms by the rapid ascent of the Hercules

This was a period that threw up such publications as The Wheelwoman and Society 9 Cycling News. Published in London over 1896 97, its title is indicative of the status and fashion orientated nature of its content. For example, 'Regents Park has seemed quite unlike itself this week, without the gracious presence of Miss Lily Hanbury. Not long ago she was an every morning frequenter on the Inner Circle, and mounted upon her neat bike, painted dark blue to match her costume, was one of the most delightful features in the delightful sport' (23 May 1896). Moreover, many newspapers and general interest magazines carried 'cycling' columns that advised on the most fashionable attire to be seen in on your machine. For instance, in the *Gentlewoman* column 'Answers to Questions – Cycling for Women by Ariel', the columnist responds to the question of one reader, Faith, with the following: 'FAITH - A smart "rig out"? What better for your figure than a "Swift" Ladies Safety No. 1, enamelled in a dark shade of green, and a "Saltoun" costume, of Mr Nicoll, 114, Regent Street, but in a slightly lighter nuance? Shall I send you the exact shade I should suggest for both bicycle and skirt?' (25 April 1897: 537). It might be noted that the fashion of having machines enamelled in colours to match clothing or riders' tastes was exceptional, even amongst the elite at the height of the boom and was seen by many contemporary commentators as mere exhibitionism.

Cycle & Motor Company in the last years of the 1920s and early 1930s.¹⁰ Moreover, the problem that this period (c.1899-c.1929) has posed to cycling history is that it has been difficult to enter using traditional methods; Norcliffe's more abstract, sociological approach might serve to open it more effectively. During this 30-year period, it could be argued that cycling remained largely bourgeois, at least in the purchase of new machines, but also became much more democratic as a whole. Importantly, cycling became commonplace. Although manufacturers and many commentators longed for a time when prestige of the type that was epitomised by the society 'boom' riders could be purchased in a first-class cycle, such a time would never exist again. Edwardian cyclists, much more than their predecessors a decade earlier, could ride the urban scene unnoticed, on machines as anonymous as they were. It could be argued that never before in the history of cycling had it been possible to cycle with so little attention being paid to one, and furthermore, that this was true for both genders; while women cycling in the boom period were still challenging enough to become the butt of the cheap humorous novel, such treatment had become completely passé a few years later.¹¹ This was almost certainly the result of continued and increasing sales to the female market, making women's cycling entirely unremarkable.

Indeed, the peculiar gender balance of early twentieth century cycling presents an interesting case study in terms of 'flanerie'. To many commentators the flaneur is gendered male on the grounds that, in visual convention, women are the object of the active male gaze and therefore cannot rejoice in their incognito; as Jenks points out, in 'a gendered imbalance of ocular practice women do not look they're looked at' (Jenks 1995, 150). Does cycling present an early opportunity for the flaneuse to challenge this view? Certainly, cycling is seen as one of the milestones in emancipatory activities taken up by middle class women. Moreover, it was often conducted alone and, as mentioned above, was rarely seen as an issue after the flurry of controversy and comment in the mid-1890s had died. The flaneuse on wheels of the early twentieth century was thus in a position to travel the streets and to observe without the problematic of traditional conventions that applied to her pedestrian sisters. On the other hand, the flaneuse on wheels remains bounded by the continued existence of Jenks' gendered imbalance of ocular practice; whatever the freedoms from other conventions that she achieves by bicycling, she still remains, if only fleetingly, the object of the male gaze.¹²

¹⁰ The Hercules Company came to public attention from rather shadowy origins in 1927. It carefully exploited the working class market, offering machines at well under £5 and constructing easy hire-purchase based on the average amount it cost a workman in tram fares to get to work per week. By the mid-1930s it had become the world's largest manufacturer of bicycles (Millward, 1995, 99 106).

¹¹ One indication of how women's cycling in the 1890s was considered remarkable is provided by Ada L Harris's *A Widow on Wheels* (1896). The widow's cycling is entirely incidental to the plot, but it still forms the title and the cover illustration, presumably to demonstrate her daringness and modernity in the pursuit of a new partner, which forms the story.

¹² For a discussion on the complexity of the feminine relationship to flanerie in the early twentieth century see Wolfe (1994).

Whatever the complexities of gender; in overall terms, two factors have to be taken into account to understand the potential that the bicycle offered for flanerie in the early twentieth century. The first, of course, is the perceived declining cultural status of cyclists during this period. The bicycle had lost its role as conspicuous wealth and fashion statement amongst the highest levels of society and manufacturers responded by looking to lower markets. Inevitably, rising ubiquity pushed cycling towards being perceived as more common, in both senses of the word. The second is the closure that seems to have been achieved in cycles themselves during the period. This was not only in terms of technological change, as mentioned earlier, but also in terms of overall aesthetic. At even fairly close inspection it is difficult to tell the difference between standard road machines built in 1905 and 1925 by the vast bulk of manufacturers, not only in layout and structure, but also in finish, even down to graphic details such as transfers and lining.

Trying to separate the two in order is difficult. Does one lead to the other, resulting in a symbiosis that can only be broken by some later significant change? Would it be reasonable to propose that, with the loss of the monied, fashionable boom purchasers came a decreasing pressure on manufacturers to develop the design of machines and increasing attempts to sell greater numbers of 'popular' models at the lower end of the market? Or, was the success of the design form itself enough to allow its continual replication without serious reassessment, so long as a substantial market could be found for it?

These questions are probably unanswerable, but the coming together of what was to prove to be a stable design form and an extraordinary market expansion at the highest levels during the 1890s is the key to the bicycle's subsequent history. An argument that might favour the former theory could be built on the analysis I conducted into the Star Cycle Company's order book of early 1898. This shows how a middle quality maker seemingly responded to a particularly sluggish male market by building brand new machines to obsolete specifications, in order that they could be sold at discounted 'clearance' prices. Star's seeming failure to sell any brand new top-grade gents' machines during the currency of the order book (surviving entries in which detail some 2000 machines) would hardly have been conducive to the company exploring new avenues of design. Having said this, the situation did not preclude Star from attempting to launch a Star Pedersen at a princely £34 in that very season. Its failure to sell any of these probably further convinced the company to be conservative rather than innovatory in the following years (see Oddy, 2002).¹³

Alternatively, one might argue that the general design format of the diamond and drop framed safety of the mid to late 1890s was not one that lent itself to

¹³ Star was a significant maker, based in Wolverhampton, turning out some 10,000 machines per annum, with considerable export interests. It was seen as a middle quality maker and, typical of this level, was happy to sell its machines 'badged' under the names of others, but it had aspirations to the first grade (characterised at this time by companies such as Humber, Elswick and Raleigh). It went on to manufacture motor cars and motor cycles. It might be that the company's failures to capitalise in top grade machines like the Pedersen (a complex patented soft-soldered frame built under license) and their strong interests in subcontractual and export sales further discouraged radical design innovation.

easy reassessment, particularly as 'closure' (in the SCOT sense) occurred almost simultaneously with the highpoint of fashionable, public and press interest in cycling. If the following 20 or 30 years were characterised by a tendency for many manufacturers to attempt to exploit lower and lower markets, then this could best be achieved by sticking to a design form that lent itself to economy in production methods and which was familiar and accepted. Both factors were to be found in the existent design form.

Design developments in cycles therefore tend to be aesthetically inconspicuous during the early twentieth century. The adoption of free wheels and rim brakes, the forward extension of the handlebar lug, and the forward extension of the front mudguard are all examples. The importance of even the most seemingly insignificant of many of these, such as the latter two, to manufacturers and market is reflected in their rapid adoption. A single season was normally enough to see such aesthetically minor details turn from the exception to the rule. If such was the indication of the latest model, and even then developments like these did not happen every year, then it says a lot for the stability of the design form as a whole. The design of the bicycle was not only diachronically stable in terms of unchanging appearance over time, but it was also largely synchronically stable, the 'popular' models difficult to differentiate from the deluxe, and one manufacturer's from another.

Only one distinctive aesthetic variation was practiced throughout the period, mainly at the luxury end of production, but interestingly this was far from universal. The 'X' frame was a design form developed by G.P. Mills for Raleigh in the 1890s.¹⁴ Although patented, it was adopted (in more or less altered configuration) by a number of first division makers in the early twentieth century, alongside other frame patterns with 'extra' tubes, seemingly in an effort to stimulate top-end sales with a clearly differentiated type of product. Most such frame designs were short lived and significantly almost all were offered side-by-side with similarly priced diamond frame equivalents; surely strong evidence of the makers' tacit uncertainty that such machines would be acceptable, even at this level. The ambivalent critical reception that the type form received in the cycling press is manifest during the early years of the century. The Scottish Cyclist in 1901 is typical; a long, generally negative discussion of the merits of the X frame is followed by: 'Mind, we do not intend to convey that these X frames are mere dodges to create a fresh demand. They are not' (The Scottish Cyclist 1901, 51). This seems to be more a disclaimer by a magazine reliant on advertising revenue, eager to revive top-end sales and mindful that their readers were potential purchasers of X frames, than a piece of heartfelt analysis. Furthermore, many of the most prestigious makers, such as Sunbeam and Lea-

¹⁴ Mills' interest in X frames began in 1893 with attempts to design an open framed (ladies') machine with the same rigidity as a diamond frame (gents'). Replacing the more normal single upper tube of an open frame were two tubes, one running from the top of the steering head to bottom bracket, the other from the bottom of the head to a point a third of the way up the seat tube, bisecting each other using an X shaped lug. Mills considered the design successful enough to introduce a gentleman's model (with the second tube running up to the top of the seat tube and thereby emphasising the 'X' in the frame) in 1896, with tandems and tricycles in 1897.

Francis, never even experimented with novelties of this kind. The failure of such machines to make a serious impression on the design awareness of cyclists generally is reflected by the fact that they were rarely imitated by makers focused further down the market.

The effect that the stability of the design form in the manufacture of new machines must have had on the perception of bicycles more generally is difficult to quantify, but is probably hard to over-estimate. The purchaser of a brand new machine in 1894 could rest assured that it was markedly different from that of even two years previous and hugely different from anything produced only five years earlier. In such a context the second-hand market is likely to have been relatively short-term. This is probably most famously illustrated in the character of Hoopdriver in H.G. Wells' Wheels of Chance (1896). Here a draper's assistant from Putney decides to spend his fortnight's annual holiday on a cycling tour. Unable to afford a new pneumatic tyred machine, or even one a year or two old, he is reduced to purchasing a second-hand cushion tyred safety of obviously antique 'cross frame' design; but, in fact, such a machine would have been no more than ten, and, given the tyres, probably only about six years old. This is compared against the other characters, a middle class girl eloping with a cad, both of whom have state-of the art mounts. The Wheels of Chance, though fictional, was reflecting a reality of lower-middle and working class cyclists mounted on obsolete machines that was widely reported in the press. Such 'crocks' went through a rapid descent into being too much of an embarrassment for most riders to be seen upon as they were progressively upstaged by more modern second-hand machines.15

This situation must have changed rapidly. A five-year old machine in 1908 would look no different, even to the well informed, from its predecessor of five years earlier, and be almost impossible to differentiate from a two-year old mount in almost every respect. Even a machine from the late 1890s could be easily and cheaply modernised to the latest specification. In such a situation the second-hand market becomes a long-term prospect with machines' currency extended for as long as they remained structurally sound. This was a problem for manufacturers, and was already beginning to generate comment in the first years of the century. As early as January 1900 The Scottish Cyclist was reporting that the large public trade shows were debilitated by the fact that 'The cycle is no longer a novelty, and the dealers' windows in every corner already give all that the shows were originally started for' (The Scottish Cyclist 1900, 51). Indeed, the 1901 Glasgow show was cancelled and the magazine opened its report on the revived 1902 show with: 'In a sense the void created [by the lack of the 1901 show] has not been disadvantageous inasmuch as the Glasgow public will perceive in the show now running a most distinct evidence of advancement in cycle construction'. However, this 'advance' was something rather different. The leader continues:

¹⁵ It should be noted that Wells was a keen cyclist and the book is accurate to every detail of Hoopdriver's route, style of machine and incidental details such as the hotels he stayed in and road conditions. It provides a particularly interesting example of fact (in terms of location and observation) combined with a fictional plot. For a full study of Hoopdriver's route see McVey (1995).

Cycling and Society

While a year ago little that was practically new could be shown for even then the freewheel and the various forms of improved brakes were not novel this year the motor bicycle, the motor tricycle and a full complement of motor-cars have been brought together with all the charm of absolute novelty (*The Scottish Cyclist* 1902, 107).

I suggest that this type of comment shows a key moment in cycling history had arrived, but one difficult to explore in linear, technological terms. Here the market seems to have developed into something different from the novelty seeking, fashion conscious buyers of Hoopdriver's time. Rather, a bicycle had come to be perceived as a standardised type form, bought for an indefinite period. Even if differentiation existed in terms of quality, this seems to have not been enough to encourage rapid turnover or aspirant purchasing at the level that commentators in magazines such as *The Scottish Cyclist* were used to, or expected. Such commentators therefore looked to other, related, areas where the aspirations that had characterised cycling nearly a decade earlier were only in their infancy. Manufacturers, however, were still somewhat awkwardly posed between an obsolete perception of what once had been and current conditions, but tended to try to prolong the former in terms of publicity and range structure.

Moreover, the efforts made by manufacturers to exploit the 'popular' market resulted in comparatively large numbers of new machines reaching the market year on year. The numbers of almost identical bicycles to be seen in every part of the country must have been increasing exponentially as a result. Many larger makers were turning out approximately 10,000 machines a year in the late 1890s, and significant manufacturers generally increased production in the years leading to the Great War, with Raleigh's output rising to approximately 50,000 per year in 1912 and 13 (Rosen 2002, 52).¹⁶

In a context of such ubiquity, cycling could never repeat its mid-1890s status, but its decline in prestige was probably compounded by the development of the motor car which effectively took attention from it as the fastest and highest status form of mechanised road transport. Of course, we can discount the oft-repeated popular myth that the motor car replaced the bicycle as a form of leisure transport during the post-boom period; clearly it could not just on the comparative numbers built, let alone the price differential. However, the car certainly did replace the bicycle as the most *visible* vehicle on the road, in the minds of both the public and the authorities. From the first years of the twentieth century the cyclist's presence was eclipsed. Correspondingly, rather than being seen as a threat to walking, which had been the case throughout the nineteenth century, cyclists became progressively more associated and increasingly associated themselves with that most democratic of all forms of transport.

However, an important factor remained. While the second-hand market and increasingly low prices of new machines must have made cycling steadily more democratic, it had not been superseded as the principal form of personal mechanised road transport amongst the vast majority of the middle classes, and nor had it become

¹⁶ Using Raleigh as a case study, Rosen (2002) explores some of the issues involved in the shift from 'the factory bicycle' (the highly craft-intensive machines of the 1890s and the first years of the twentieth century), to 'the mass bicycle' of the inter-war years.

fully placed as the poor man's means to travel to work, as it would be in the 1930s. There was still a substantial market for top-grade roadsters in the £10 15 bracket, as evinced by the large numbers of makers providing at this level, while most second line and 'popular' models were in the £6 £10 range. These prices were still seen as beyond the limits of the working man. Moreover, the fact that these machines were roadsters without pretension to sport and competition is a significant indicator of the type of rider.

However, the second-hand market was beginning to provide access to cycling at the lowest levels. While in the 1890s the date of the machine was probably the significant class discriminator, in the early twentieth century this seems to have moved toward the grade of the machine. All these factors are amply summed up in this 1904 comment on 'The High Grade Bicycle':

Our contemporary furnishes rather curious proof of the effect on the second-hand market of the fall in prices. When the high grade cost on the average 18 guineas, and the second grade stood at 13, our contemporary's private sales advertisements columns were many and voluminous, running to many pages. Today there is scarcely one column of these advertisements in 'Cycling'. The reason lies, in our way of thinking, in the fact that the second-hand cheap machine is not worth advertising to the expert or real cyclist. It is more easily sold through the local weekly at prices that represents a loss of about 50 per cent on the rider's first cost. The workman or labourer becomes its owner, and the mission of the cycle opens a further chapter for good (*The Scottish Cyclist* 1904, 33).

The tone of this article still lodges 'serious' cycling firmly within the realms of the comfortable middle classes, with the second-hand cheap machine doing the mechanical equivalent of well meaning middle class ladies' missionary work in education and social welfare in the slums. Yet at the same time the tone is markedly different from the concept of 'arry the working class cyclist of the editorial of the 1890s.¹⁷

In this context anonymity truly flourished. Increasingly high numbers crossed with the much more dramatic appearance of motoring ensured that cyclists themselves were unremarkable. Meanwhile, the machines they rode were inconspicuous. Almost all of them were black enamelled diamond frame or semi-curved open frame roadsters. It is likely that, in a context of steadily increasing production and sales in a slowly lower reaching and presumably aspirational market, most makers saw no need to innovate. This had the advantage to the maker in that standardisation was easily effected, an essential part of reducing prices, but it also must have relied upon conservatism on the part of the market. Again we return to the tight 'closure' that seems to have surrounded public perceptions as to what a bicycle should look like. Just how unusual was the cyclist who veered away from the norm is well illustrated in the documentary book *The Green Bicycle Case*. This is an exploration of an English murder trial in the early post Great War period in which the suspect had made himself

¹⁷ It was commonplace for cycling journals (and other non cycling popular sources) in the last years of the nineteenth century to use 'arry (with the significant dropped H) as a generic for any uncultured male of below 'office-boy or junior clerk order'. For example, see 'Where 'Arry Buys His Crocks', *Cycle and Camera* (1897).

obvious by riding a green bicycle (otherwise a standard diamond frame machine by BSA), rather than a black one which might well have passed unnoticed (Wakefield, 1930; see also East, 1993).¹⁸ It is only when the black roadster reaches the bottom line of cheap manufacture in the last years of the 1920s and early 1930s that the situation begins to change and a new style of bicycle begins to be a noticeable part of wider cycling culture, this being the 'lightweight'. Mainly built by smaller craftbased workshops, the lightweight was designed primarily with sports performance in mind. It was lower built than a roadster with finer tubing and, significantly, it was usually finished in bright colours, making it very obviously different from the established aesthetic of the roadster. In the context of a period of mass cycling and affordable roadster style machines, coupled with the burgeoning keep-fit movement, it could be argued that the lightweight became the aspiration of the new working class market, replacing the first-grade roadster offered by the big makes and finally shifting the activity from the bourgeois culture it had represented for a generation. By the mid-1930s no big manufacturer was offering a first-grade roadster that would compare to those of a decade or two earlier, in either price or quality.

Could Norcliffe's flaneur be more believable then in the context of the early twentieth century rather than the 1890s? During this later period, it would be possible for the painter of modern life to mount a diamond frame roadster and cruise the boulevards and streets of the urban environment without being glanced at by others. The icon of modernity that our flaneur would be riding would be truly that by itself being unremarkable, unique amongst forms of mechanised personal transport of the time in having passed beyond the stage of public comment. On such a machine one could truly be 'a prince who everywhere rejoices in his incognito' (Baudelaire 1995, 9), even on a top-grade mount, difficult to discern from the mass.

This proposal fits well with writers such as David Harvey who argue the years just preceding the Great War to be a key time in establishing the construction of 'modernity'. Harvey's argument is based on the incidence of many key texts such as the writings of Freud, Joyce and Wolfe, coupled with fine art movements toward Vorticism, Dada and conceptualism, alongside the development of Taylor's 'scientific management' and the establishment of Ford's Highland Park plant with the implications it had for industrial organisation and market exploitation (Harvey 1989, 28–30).

Furthermore, two-wheeled strollings could be taken out into the suburbs and countryside with just as little comment, thereby fulfilling Norcliffe's claims of the increased range of the 'flaneur on wheels' in comparison with the traditional urbanbased pedestrian version of the early to mid-nineteenth century. In this construct the

¹⁸ Black was the most polished and hard-wearing of any enamel finish of the period and was favoured by almost all bicycle builders regardless of scale. However, many of the 'best' makers of the early twentieth century, such as Raleigh and BSA, offered their top-range models in green enamel (but also in black if requested). This seems to have provided the most obvious level of differentiation for those who desired it. Having said that, contemporaneously Sunbeam adopted a policy of all-black finish only, deleting green enamel and even nickel plating as options, in spite of making no 'popular', or even mid-range models (in 1919 their cheapest machine was over £20), which might indicate both the conservatism of manufacturers and the low demand for differentiation by colour.

intellectual criticism practiced by the flaneur becomes that much more modern by including the rural as an adjunct to urban spectacle. The strollings of the flaneur on wheels of the early twentieth century would not be akin to the very popular escapist romanticism of the drawings of Frank Patterson, which reached their apotheosis during the inter-war period. Patterson's line drawings, published through the period in the magazines Cycling and, to a lesser extent, The Motor, became the defining image of the aspirations of the inter-war touring cyclist. Idyllic English countryside seems to be punctuated by nothing but thatched cottage tea rooms, half timbered village inns and unchanging market towns. However, while Patterson demonstrated to the urbanite the possibility and even ease of access to the countryside that the bicycle offered, his work raises a *contradiction* in which the products of modern consumer society and industrial manufacture are used to transport their users as far away from both as possible, yet that possibility is only allowed by their existence. Instead the flaneur on wheels would hold interests more akin to those of Harry Inglis in his Short Spins of 1897.¹⁹ Here the countryside becomes the equivalent of the accumulation of the past that Baudelaire saw in pre-Haussmann Paris, a symbiosis in which the past acts as a foil to 'modernity' that proves the latter's qualities, rather than demonstrates its failings. In this way the flaneur on wheels would take a detached intellectualised viewpoint, different from that held by those in the river of life.

To take Norcliffe's concept to conclusion, one might comment that having demonstrated that the cultural context existed for flanerie on bicycles, how much of it actually went on remains open to question. Baudelaire had the hard evidence of the work of Constantin Guys and a whole school of visual art to prove his point against the hierarchies and conventions of early nineteenth century history painting.²⁰ It is easy enough to find the conventions of Pattersonesque escapism in cycling, which might act as the equivalent of the history painting, but much more difficult to find the equivalent of Guys and the detached interest in the here-and-now-and-everyday. Having said this, in his and possibly her engagement with a consumer durable that afforded personal transport of an inconspicuous kind, there is no doubt that the early twentieth century cyclist more than fulfils the demands of 'that quality you must allow me to call modernity' (Baudelaire 1995, 12). In today's terms, the cyclist was

¹⁹ Inglis, the author of *The Contour* road-book series, was a prime example of the bourgeois cyclist, with both the time and money to devote to his interests. Typical of Inglis' delight in all aspects of the passing scene is '...the road runs for nearly a mile alongside the prettily wooded policies of Morton Hall. A fine view of the Straiton Oil Works is obtained, with the burning heaps of slag thrown out from the retorts' (Inglis 1897: 70). For a full account see Oddy (1999).

²⁰ Baudelaire's essay focused on the work of the artist Constantin Guys who worked as an illustrator-journalist (for *The Illustrated London News*, effectively acting as a photojournalist but using drawing). Guys carried the principles of this into his fine art work, attempting to capture the everyday as one saw it, without romanticism or choice of subject by 'acceptability'. This Baudelaire compared to the work of artists such as David, who 'dressed' their subjects in classical garb and put forward a 'grand narrative', which perpetuated an aristocratic world-view. Baudelaire's view was that the outlook of an artist such as Guys was that of the flaneur who saw visual richness in the enjoyment of the moment.

offered the opportunity for the tourist gaze, or the contemplation of that gaze, similar to that now afforded by the motor car.

However, the cyclist offers a particularly difficult example to place easily in the language of 'the tourist gaze' as it would be understood today from the work of John Urry. The cyclist's slow pace and freedom of movement in relation to that of even a motorist might predicate against the processed, controlled model that Urry sees because of mass transportation systems and leisure culture of the present day. Such a controlled gaze is implied by John Ruskin, who Urry cites in the preface to *The Tourist Gaze*: 'Going by Railroad, I do not consider travelling at all; it is merely being "sent" to a place, and no different from being a parcel' (Urry, 2002). Here we have a comment on what Urry terms the 'mobilised gaze' through a railway carriage window that directly transfers into the gaze through a car windscreen. This, Urry proposes, is merely 'the capturing of sights' that might be associated with tourist photographs (a key part of his definition of the tourist gaze), rather than studied observation. A key element here is the detachment of the form of transport from the activity of looking at a pre-determined destination, particularly as a passenger, presuming the transport to only being a means to the end.

But, it is clear that to many cyclists the activity of cycling is at least as important as the destination, while the pace and nature of the activity is not one that gives the framed 'mobilised gaze' mentioned above (Urry 2002, 152-153; see also Spinney, this volume). This, in turn, raises a question as to the point at which the tourist gaze becomes something more considered and knowing, rather as Baudelaire's flaneur saw and understood something more than his predecessors. Patterson's drawings could be interpreted as indicative of the tourist gaze of the early twentieth century cyclist, as could be cycling's strong links with amateur photography at the time.²¹ Yet Patterson's work also assumes a delight in the activity of cycling, which is more that of the enthusiast or connoisseur; while its context was the specialist, rather than popular magazine. In this way, while we see modernity in all the trappings of the activity, cycling in the early twentieth century remained closer to Baudelaire's concepts than to those of more recent commentators, even if its reach was extraurban and wider than that of the pedestrian flaneur of 50 years earlier.

In conclusion, Norcliffe's use of Baudelaire's concept of the flaneur to describe cyclists, while questionable for the period he applies it to in *Cycling to Modernity* (2001), may not be as culturally problematic as it at first sounds. By picking up the concept of the flaneur, and using it to explore the activity of cycling in the early twentieth century, we gain a better grasp of cycling's significance in that period. We begin to illuminate 'cycling's dark age', and render it more amenable to further study.

²¹ Such was the interest in photography and cycling that there was even a magazine published under the title *Cycle and Camera* in London in the 1890s. In the early twentieth century, the relationship between cycling and photography remained sufficiently obvious to be jokingly commented upon in the Ealing comedy 'Kind Hearts and Coronets' (dir. Hamer, 1949), itself an adaptation of Roy Horniman's novel *Israel Rank: The Autobiography of a Criminal* (1907).

Application of the concept of the flaneur does this by moving discourses around cycling out of the traditional modes of cycling history and away from the focus on technological advance. The key here is not actually the idea of the flaneur in particular, but the use of sociological sources that are capable of successfully exploring the very different context that the twentieth century brought, in making the cycle and its rider unremarkable and anonymous. Far from 'treading water', we can thus better recognise how the early twentieth century cyclist was pushing personal mechanised transport into a new phase of modernity which we still take for granted today, while the world of motor transport, so often seen as *the* icon of twentieth century modernity, was merely beginning to drive along the road that cycling had left behind in the late 1890s.

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Chapter 6

Bicycles Don't Evolve: Velomobiles and the Modelling of Transport Technologies

Peter Cox with Frederick Van De Walle

The history of the bicycle with which we are most familiar tends to present a story of a machine undergoing a series of logical changes over time, much as any other technology. This history takes us from the bicycle's primitive first beginnings, through a succession of rational, progressive steps, to a final, mature form in the classic diamond-framed machine we recognise today. A few evolutionary side branches and dead ends are noted along the way, reflecting oddities and novelties that occasionally occur but do not distract from the main narrative. It is a story that can be told in isolation from other forms of personal road transport, since the bicycle achieved its final form before the end of the nineteenth century. Indeed, when framed through this dominant historical narrative, it can be tempting to portray the bicycle as fundamentally anachronistic in today's society, as superseded or out-evolved by motorcycles and motor cars.

However, closer inspection of this narrative reveals it to be fundamentally flawed, and to eclipse other ways of telling the story. Its continuing dominance, then, has important negative consequences for the bicycle's role as a transport technology into the twenty-first century. The crucial contest, we want to suggest in this chapter, is between open (and alternative) and closed (and predictable) futures for velomobilities:¹ whether indeed the cycle as a mode of mobility has a creative future or whether it is condemned only to repeat past patterns of use.

Social constructionist approaches to the history of technology have revealed hitherto unexamined features of technological change. These approaches emphasise political, economic and socio-cultural forces that are arguably more important to an understanding of the shaping of technology than the apparent imperative of historical progress (Bijker, 1995; Edge, 1995; Mackenzie and Wajcman, 1996; Feenberg, 1999). This chapter analyses a particular aspect of cycle history in the same vein, not simply in order to change the emphases on certain aspects of cycle design and conceptualisation, but so as to open up and re-examine the relationships of cycles and cycle technologies to other forms of personal road transport. These interrelationships, we argue, have important consequences beyond the historiography

¹ The use of the term 'velomobility' as a parallel to 'automobility' is discussed at further length in the Introduction to this volume.

of the bicycle. By re-examining the social forces that have shaped the story of the cycle, the aim of this chapter is to encourage a rethinking and revaluing of different transport options potentially appropriate to the mobility challenges of the twenty-first century.

By exploring the relationships between various forms of transport technology, we establish a narrative that does not marginalise bicycles and other 'non-automobiles' as 'obsolete' or 'failed' technologies, but constructs them instead as viable and pertinent options within a broad set of appropriate and sustainable transport solutions. In particular, we investigate the class of human-powered vehicles known as velomobiles and we examine their relationship to conventional cycle designs and to the motor cycle and the automobile.

Briefly, a velomobile is a form of pedal cycle (two, three or four wheeled) with a form of enclosure or bodywork serving both to protect the rider and to increase the aerodynamic efficiency of the vehicle.² Velomobiles have been built in small but significant numbers since the 1920s and today there is a flourishing and growing niche market, with several designs currently in production.³ One might wonder whether the velomobile is a special, elite form of cycle, a kind of car without an engine, or something else entirely, and indeed, the velomobile disturbs and unsettles existing categories. By interrogating both the place of velomobiles in the historiography of the pedal cycle and the relation of cycles to motorcycles and cars, we argue that the conventional ordering of transport technologies into individual segregated histories and the standard depiction of the relationships between transport types is problematic for the development of alternative mobility futures.

One difficulty is that velomobiles, along with recumbent cycles (with which they share a seated riding position), do not fit easily into conventional narratives of cycle history. They remain a category apart, an interesting but diversionary footnote. They are more often conspicuous by their absence in popular books about cycling, even when these are designed to help potential riders choose between different styles of cycle appropriate to their intended use (for example, Seaton, 2006). Such marginalisation is of course self-fulfilling; an under-represented alternative, the velomobile remains relatively invisible to the mainstream, justifying its continued marginalisation.

Bicycles and Other Transport Technologies

Bijker's influential study *Of Bicycles, Bakelites, and Bulbs: Toward a Theory of Sociotechnical Change* (1995) importantly placed the development of cycle technology within the wider compass of studies of technology. This work has been developed significantly by Rosen (2002). Although open to criticism (see Clayton, 1999, 2002a, 2002b; Bijker and Pinch, 2002; Epperson, 2002), Bijker's work moves beyond simplistic assumptions of technological determinism, and importantly

² The term 'cycle' is used throughout in order not to discriminate between two or more wheeled designs.

³ For a fuller treatment of contemporary and historic velomobiles see Van De Walle (2004) and also Fuchs (2004).

highlights the social dimensions of technology (Mackenzie and Wajcman, 1996). Technologies not only have an enormous impact on societies; they are themselves also significantly shaped by social, political and economic factors.

Conventional histories of artefacts importantly narrate the 'detailed study of technological designs and their changes over time' (Staudenmaier, 1985, 173). As a design object, the bicycle is admirably served by what can be described as an 'internalist' approach to the study of technology. Cycle historians have explored the production histories of particular manufacturers and marques, of changes in frame design and componentry.⁴ The history of cycle sport generates a different literature, whilst other studies contextualise cycling within wider social history (McGurn, 1999).

The dominant emphasis within these writings is artefactual. Whether the central focus is an individual technology, producer or user group, stress tends to be laid on the material product and its impact or, conversely, on the effects of society on the artefact. Much less explored is the very *concept* of the cycle as a mode of transport: what exactly is it; what is it understood to be for; and what is it understood to do? When is a cycle a cycle, and what makes it so? When does it cease being a cycle?

The conventional telling of the history of the bicycle is typified by David Herlihy's *Bicycle: The History* (2004). Herlihy structures his account by identifying a number of key stages along the developmental path that leads to the bicycle as we know it today. The pre-history of the bicycle, according to Herlihy, lies in Karl Von Drais's running machine. The first machine to be called a 'velocipede', this had two wheels in line, connected by a simple frame, front wheel steering, and it was propelled by a running motion. Effectively, Von Drais was designing a mechanical horse, hence the popular nomenclature of 'dandy horse'.

The major breakthrough towards the bicycle 'proper' was the addition of pedals to the front wheel (the 'hobby horse') enabling the vehicle to be propelled 'steadily and consistently' (Herlihy (2004, 75). The ongoing search for greater speed and comfort resulted in the creation of ever larger front driving wheels and the 'high wheel' or 'spider wheel' bicycle, later known as the 'ordinary'. Herlihy considers the next stage in bicycle development to be the introduction of the 'safety' bicycle, most notably the Rover model pioneered by Starley and Sutton. This rapidly gained equal sized wheels, with the rear wheel driven by a chain moved by rotating cranks set midway between the wheels. The further introduction of the pneumatic tyre from the late 1880s established the design of the now universally familiar diamond framed bicycle (on the remarkable obduracy of this design, see also Oddy, this volume). The success of the diamond frame is at least partly attributable to its manufacturing simplicity, utilising steel tubing brazed into cast lugs, the same castings being employed across a wide range of frame sizes to suit different riders. Only with the diamond frame was mass production in varying sizes feasible, and thus it is only at this stage that the cycle can really be understood as a potential mode of transport, rather than as simply a plaything of the rich.

⁴ See for example the International Cycle History Conference proceedings published by Van der Plas Publications, http://www.cyclepublishing.com (also http://www.cycling-history. org/).

The tacit implication of Herlihy's historical narrative is that the development of the bicycle reached its fulfilment during the 1890s. In other words, once the basic principles of the pneumatic-tyred safety had been established, subsequent developments and changes in design should be seen either as specialist variations (for particular purposes) or as ornamental, rather than as significantly different. A further implication is that variance in design away from the conventional diamond frame (as is the case, for example, with most folding cycles) will inevitably result in a less efficient or 'worse' ride. There is, in other words, an implicit assumption with no empirical basis that any move away from the 'ideal type' intrinsically results in inferiority. So, tricycles, popular among women in the late 1880s as an alternative to the high wheeler but which offer no 'significant advantages' once the safety bicycle becomes widely available, are generally regarded as a 'dead end' in developmental terms. Recumbent cycles, with a seated riding position, feet forward of the body, are also relegated to a walk-on part in this cycle history; whilst briefly popular in the 1930s, the suggestion is that they too are a developmental cul-de-sac, although it is acknowledged that they offer the potential for significant technical advantages.

We are troubled by such marginalisation. Our concern is that transport technologies with great potential are rather too easily erased. Much of the work done by the rider or engine in propelling any vehicle is that of overcoming air resistance. Recumbent cycles, by moving away from an upright rider position, reduce air drag and thereby increase efficiency, enabling greater performance in either speed or distance for the same energy output. Conversely, the same journey could be made with less expenditure of effort.

Such innovative and potentially significant technologies are disciplined in other ways. Recumbent cycles have been excluded from sporting competition since 1934 by the UCI (Union Cycliste Internationale, cycle sport's governing body); incentives for commercial development of such 'non-standard' machines are thereby reduced. Further, rearrangement of the cycle frame requires a different approach to manufacturing from the conventional lugged frame. Recent developments in both recumbent bicycle and velomobile technology and production have therefore been pioneered outside of the mainstream cycle industry, largely by entrepreneurial individuals working away from the major manufacturers. Velomobiles, depicted as a specialist form of recumbent bicycle, are thus placed in an extremely marginal position as transport technologies.

So the bicycle is at the end of its developmental cycle, and has arrived at its 'definitive' shape, by the mid-1890s. The popular narrative tells of 'a finished product'. Any further developments in this transport technology must involve radical progression from its definitive form by, for example, the addition of a motor to create a motorcycle.

The writing of bicycle history as a self-contained narrative, parallel to discrete histories of other modes of mobility, creates a framework that emphasises the separation, and even encourages the segregation, of different transport types. But such perspectives are always retrospective. Segregation of histories by mode of mobility misses important linkages and commonality between transport technologies. These linkages can be seen in the records of manufacturers active not just in this early period of cycling, but for many decades after. Singer, Humber, Rover and Triumph in England, and Peugeot in France, are examples of manufacturers that for many years made all types of vehicles, automotive and human-powered. These linkages remain significant even after individual manufacturing facilities specialised in one form of product or another.

Critically, in the pioneering decades around the turn of the twentieth century, transport designers and manufacturers worked in ways that demonstrate these linkages. Di Dion Bouton engines were attached to quadricycles and tricycles, retaining the cycle saddle and handlebars, and with a passenger carried at the front, facing forward. Such designs are generally regarded as belonging to the history of the automobile, but ought they to be? The history of motoring is perhaps a more apt description. The adoption of the système Panhard (consisting of radiator, engine, clutch, and final drive to the rear) as a standard automobile layout did not eliminate the clear design origin in carriage manufacture of the vehicles in which it was employed. The term 'horseless carriage' was still valid even though things had moved rapidly beyond the separate tractor unit of De Dion and Bouton's first vehicle.

Simple motorisation of the pedal cycle is understood as taking it beyond its category, yet the addition of a motor does not necessarily eliminate propulsion by the rider. The retention of pedals in a motorised pedal cycle, as originally defined by the term moped, indicated a hybrid vehicle requiring input from both rider and motor for efficient (and sufficient) function. A similar overlap between motorcycle and automobile can be seen in 'cyclecars' and 'light cars', categories of minimalist vehicle including, most famously, the Morgan Runabout from the early twentieth century. The journal The Cyclecar was founded in 1912 to cater for those exploring this area of automobility. By 1919 it had been renamed The Light Car and Cyclecar. Utilising motorcycle technology (in contrast to the système Panhard) enabled greater performance. Many were built as single or two seaters. Some retained visible links to motorcycle technologies, but the appropriate number of wheels remained subject to debate (Denley, 1919). Given this lack of separation of transport technologies into distinct categories, it is unsurprising that pedal vehicles resembling cars velomobiles were also built. The advertising for the Pedeluxe Company's 'Pedal Cyclecar', a solo tricycle velomobile produced in London in the 1920s, typically blurs the boundaries between vehicle categories in its product description (Whitehead and Eliasohn, 1996).

In the inter-war period the biggest manufacturer of velomobiles was the firm of Charles Mochet. From 1924, Mochet produced both cyclecars (motorised) and velocars (human powered velomobiles in both single and two seat versions) (Brühl, 2004). Both velocars and cyclecars were wooden-bodied streamlined vehicles for practical town use. Some velocars were retrospectively fitted with motors, and the Mochet works also turned out a small number of 'Ptitauto's', velomobiles factory-fitted with a small motor. Nevertheless, Mochet retained pedals on all his powered light cars until the production of the K-type in 1947 (Brüning, 2000, 65). Thus, even Mochet's cyclecars might best be understood as hybrid vehicles, designed to use the combined power of both motor and driver (and/or passenger). Drawing on a parallel with motorcycles, we might describe them as 'moped-cars'.

So a more realistic account of the development of personal road transport might describe a continuum of transport types and technologies, understanding them not as categorically distinct from one another, but as interlinked parts of a greater set of possibilities. Such an account would also require us to look in detail at the interstices and margins of the categories now popularly recognised. Before proposing a new means of mapping the interrelations of transport technologies, however, we return briefly to consideration of some of the implications of conventional historiography.

Writing about Historical Change

The overwhelming metaphor applied to the narrative history of technologies is that of evolution. We commonly refer to the ways in which technologies 'evolve', but this ease of allusion can serve as much to obscure as to illuminate. Descriptions of sociotechnical change have absorbed this metaphor of evolutionary progress to the point where the metaphor itself has become invisible. Whatever value judgement is passed on any particular change in technology, social organisation or behaviour, the dominant metaphor employed to describe change is that of a linear evolutionary journey. This metaphor has profound implications for our understandings of sociotechnical change.

Just as certain technologies can become 'buried', or so mundane that they are taken for granted, so too can the metaphors employed in narrating their changing appearances and usages. Here, the metaphorical description of the historical development of cycle technology as 'evolutionary' is key. For example, Richard Ballantine's influential *Bicycle Book* (2000, 11), describes technical developments as 'evolution'; Mike Burrows' *Bicycle Design* (2000, 53) refers to the 'Evolution of the Bicycle Frame' and provides an illustrative family tree to reinforce the image. In a more scholarly vein, Berto (2005, 21) describes how 'it took a quarter of a century for [bicycles] to evolve to the standard pneumatic-tired, chain-driven design we know today'. This is not to argue that these authors have an ideological stake in the use of evolution as a precise metaphor for the changes described. Rather, it is to highlight the largely unconscious absorption of evolutionary language which inadvertently reproduces the dominant historical narrative of cycle-related technologies.

This dominant evolutionary narrative fails to capture the growth of a complex diversity brought about by random mutation. Instead, it builds a pseudo-Darwinist model in which the primary focus is on the formation of a 'most evolved' form, and its triumph over (and eventual superseding of) all 'lesser' species. The implications of the routinised use of this narrative of evolutionary progress are profound and especially important for those considering the problems of transport technology and the desire to move away from car-dependence deeply influential. Most significant is the link between the evolutionary metaphor and a hierarchical depiction of evolutionary change which includes an implicit notion of obsolescence. Any form of transport 'further back' along the evolved 'offspring'. This evolutionary narrative offers a deterministic survivalist mode of understanding technologies whereby what thrives now is 'naturalised' as being fittest. Old technologies still remain, but as obsolete or archaic curiosities. They must always be assessed against the technologies that have 'replaced' them and rendered them outmoded. There may still be developments

even highly sophisticated ones in 'obsolete' technologies, but these are generally reserved for highly context-specific, specialist applications, predominantly in sport and leisure rather than utility use.

Change and 'Development'

However 'developed' and 'fit for purpose' a human powered vehicle may be, within the master frame of linear evolutionary development outlined above it is rendered primitive and backward by virtue of its place within the hierarchy. Such triumphant narratives of the 'most evolved' over 'lesser species' have been identified and analysed in many areas of study, and have been most forcefully challenged within development studies, and specifically the emergent critical tradition of post-development studies (for example, Rahnema and Bawtree, 1997). Here, assumptions of 'progress' and even of 'development' itself have been subject to sharp scrutiny. Notably, two leading exponents of the critical reappraisal of development thinking have also been influential in rethinking transport solutions; Illich (1973, 1974) and Sachs (1992, 1996). For Sachs, the false promise of 'development' and the rise of the automobile as a means of personal mobility are intertwined: 'Development has created a global middle class of those with cars, banking accounts and career aspirations ... Its size equals roughly 8 per cent of the world population which owns an automobile' (Sachs, 1996, 23).

Post-development thought challenges the evolutionary determinism implicit in dominant narratives used to depict and direct social change in so-called developing nations. Post-development claims that linear evolutionary narratives close off possibilities for self-determination, locking the subjects of 'development' into mimicry of their former colonial rulers. The very definition of 'development' is implicitly Social Darwinist, whereby the social and technological systems prevailing in the western world owe their dominance to intrinsic, inherent superiority, so that rational social change entails attaining the structures, economics and politico-cultural forms of the dominant (former imperial) powers as quickly as possible.

Evolutionary metaphors should be as seriously questioned in the field of transport studies as they have been in post-development studies. There is no inherent evolutionary process in technological development. The presence and persistence of particular technologies results from political, economic and social decisions. Transport technologies arise within complex cultural matrices and their form, use and practice are shaped by context. The values of technologies are also contextual: though technologies may become obdurate, their meanings are neither inherent nor static. Technologies certainly change, they may become more sophisticated, more complex, but these changes are neither inevitable nor necessarily unidirectional. Whether particular changes are even desirable is a judgement itself subject to socio-cultural creation, with that decision informed by power relations in the politico-economic sphere.

The Myth of Progress

The centrality of the myth of 'progress' in discussions of sociotechnical change should be challenged. Its inappropriateness can be illustrated by reference to Eileen Leonard's *Women, Technology and the Myth of Progress* (2003). Leonard examines the impact of technological changes on women's lives and observes the degree to which gender perspectives have largely been invisible in narratives of technical advance. Consequent upon this gender-blindness which may be echoed in terms of class, ethnicity, impairment or any other basis of social stratification Leonard concludes that 'constant technological development, no matter how breathtaking, is never a guarantee of social improvement' (2003, 188). If change is no guarantor of social improvement, then the narrative of evolutionary progress accompanying technological (and social) development is revealed in its powerfully mythic role, serving to justify existing social and power relations and leaving inequalities not simply unchallenged but reinforced.

The dominant narrative used to describe change can, then, be characterised as a discursive conflation of several particular narratives; of development, evolution, progress, and change. Together these narratives impose and articulate both a 'natural' evolution of technological forms, and a corresponding hierarchy of value of those forms. Accordingly, the latest transport technologies are both 'natural' and 'superior'. The consequence for a transport technology such as the velomobile is its rejection not on the basis of its inappropriateness but by virtue of its place in the hierarchical order.

Reconceptualising Transport Technologies

Evolutionary narratives have been applied to wider changes in transport technologies (for example, Hall, 2000). The story told is of changing patterns in transport as a logically ordered series of technical improvements following a largely unilinear pattern. This historical ordering of events is taken to reflect inevitable and significant progress: a meaningful history by which increasing technological advances represent increased rationality. Of course, such assumptions can be and are questioned. For example, Ritzer (1993) describes the irrationality of (hyper)rationalisation, and helps illuminate how urban travel times have remained almost static over time, despite big increases in potential maximum speeds of vehicles and energy consumed. Yet such evolutionary narratives are also remarkably resilient.

Feenberg (1999, 77) uses the concept of unilinearity to describe a determinist approach to technology. Extending this, we describe as 'evolinear' the complex of evolutionary, linear and hierarchical developmentalism at work in the sphere of personalised transport technologies. The addition of an evolutionary element to Feenberg's unilinearity importantly introduces and reminds us of the implicit presence of hierarchies of value at work in processes of change. When applied to the sphere of personalised transport technologies across the twentieth century, and at its simplest, the motorcycle replaces the bicycle, and the car replaces the motorcycle. This is shown in Figure 6.1.

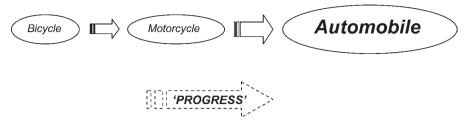


Figure 6.1 Linear, evolutionary organisation of personal transportation

The 'normality' of this hierarchical ordering of personalised transport technologies is a key facet in the obduracy of the current 'sociotechnical frame' (Rosen, 2002) through which such technologies are understood. The implications of this current ordering are multilayered and create three 'popular' or 'common sense' hierarchies which are commonly expressed in ordinary, everyday discourse, if also challenged by advocates of those modes lower down the hierarchies.

The first hierarchy is of status. The perceived social desirability of each form of transport is ranked, with the cycle condemned to subordinate status: its use represents social disadvantage or failure. Correspondingly, an upgrading between 'evolutionary stages' is assumed to be 'natural'. If one technology is understood as superseding another, then each individual user can be assumed to follow a similar pattern of acquisition, upgrading from one mode to another. Indeed, it is heralded as a major advance in democratisation that many individuals, at least in societies such as the UK, can now become car owners without passing through the intermediary stages. Gaining a driving license is a very significant rite of passage (Carrabine and Longhurst, 2002; Thompson et al., 2002), and a process currently incommensurate with learning to cycle. As a corollary, shifting 'backwards' through the hierarchy, from car to motorcycle to cycle, risks social perceptions of downgrading and loss of status. Adopting a 'lesser' mode of transport may therefore only be perceived as acceptable if chosen in addition to car use, where it may be seen as a signifier of increased leisure (this corresponds to the observation by Parkin, Ryley and Jones (this volume) that cycling in affluent societies is today more likely among members of car-owning households).

A second hierarchy is of economic value, whereby most people assume cycles to be much cheaper than motorcycles, which are assumed to cost less than cars. Even in high consumption, increasingly leisure-based societies, such as those of Western Europe and North America, to spend 'too much' on a cycle is likely to astonish, and even incur the ridicule of, others. Cycling 'ought to be' cheap.

A third hierarchy is of use. Each mode in the evolinear progression conceptually replaces the previous form and use. Therefore, 'lower order' technologies cannot logically be considered as so viable as those modes replacing them in the hierarchy. The persistence of the cycle can be justified through its transference to other roles sport or leisure, for example but its transport function has been replaced.

These interlayered hierarchies also create a teleology the private motor car as the logical solution for all mobility needs which closes the imagination to alternative visions of future personal transport technologies. Solving mobility

Cycling and Society

problems, increasing quality of life and clearing the road to sustainability, all the answers to these lie on the shoulders of massive technological innovation ... of the automobile. The car of the future awaits! Further technological advance is understood as exclusive to automobility, other modes having already reached their acme before being superseded.

In the hierarchy of bicycle, motorcycle and automobile, the three individual components are not strictly defined. They are, however, stabilised. Their meaning rests on their unexamined normality: everyone simply 'knows' what a car is. As a totalising narrative, this depiction of the 'way things are' serves to exclude categories of vehicle that do not fit the simplicity and clarity of the model. Vehicle concepts that challenge the boundaries of these categories are rendered 'abnormal' and excluded from the mainstream. Some intermediate categories are excluded by legal definition, some through being socially designated as 'specialist'. Either way, as personal transport they represent evolutionary 'dead-ends', anachronistic and with no hope of development.

Changing Technologies and the Evolinear Model

With the stabilisation of the bicycle in the 1890s, a veil is drawn over the variety and innovation of form and design before this date. The general rejection of subsequent innovations and attempts to change the bicycle 'as we know it' serves to reinforce the dominance of the conventional diamond frame device. HPV (human powered vehicle) enthusiasts argue that the UCI's decision, in 1934, to outlaw recumbent seating positions and to enforce stricter regulation on the legal definition of a bicycle for sporting purposes was a critical junction (Fehlau, 1996; Schmitz, 1999).

The small-wheeled (16["]), fully suspended, open frame Moulton bicycle of the 1960s was another innovation rejected by the cycle industry until it sold in sufficient numbers through independent production to significantly impact on the UK trade (Hadland, 1992). Even now, 40 years after the introduction of the first mass produced small wheeler, the qualification 'small wheeled' (occasionally seen as synonymous with 'shopper' or 'folder' and carrying assumptions of a significant loss of performance) is still routinely made – it is not just 'a bicycle' but a particular kind of bicycle.

Yet the dominance of the diamond frame should not obscure the experimentation and variation exhibited in design as engineers have constantly reacted to the need to market to different audiences and respond to changing conditions. A glance at the advertisements in the *Cyclists' Touring Club Road Book* of 1896 reveals the lever driven 'Alert' cycle from the New Cycle Co. Ltd, the conventionally shaped but bamboo-framed cycles from the rather obviously named Bamboo Cycle Co. Ltd, and the 'Spring-frame' 'Rational Umpire' by Lingford Gardiner & Co. alongside the Humber, Rover and Rudge-Whitworth cycles which are deemed to be sufficiently familiar to the reader of the volume as to require no illustration.

Almost a century on in 1994, following the innovative frame constructions and riding positions employed by Chris Boardman and Graeme Obree to set new world records for cycle racing's 'blue riband' event, 'the hour' (in which the rider covers as great a distance as possible, unassisted, within one hour), a plethora of new

designs emerged as manufacturers vied to produce the most aerodynamic upright seated position cycle. But freshly drafted UCI regulations quickly outlawed these developments. Despite these restrictions, manufacturers continue to compete for a share of an ever more segmented market with increasingly specialised innovations. Contemporary cycling publications and catalogues provide ample evidence that the range and diversity of cycling technologies is now enormous (and certainly far greater than 1886, when Griffin's *Bicycles and Tricycles of the Year 1886* catalogued 89 bicycles and 106 tricycles). Yet this diversity is largely unknown outside of cycling worlds.

Remaining within the prevailing conceptualisation of transport technologies as a logical evolinear progression, bicycles and any transport option that appears to be a development of a bicycle can be defined only within the limitations imposed by the evolinear framework. That is, they remain essentially obsolete. Potentially, significant and relatively novel cycling technologies such as velomobiles, recumbent cycles, cycles for people with special needs, along with other innovations that depart from the standard form of the bicycle, can be dismissed as specialist products, essentially irrelevant. This irrelevance is two-fold because first, the bicycle is seen to have evolved to full maturity by the 1890s and second, the cycle as a concept has been superseded in the mobility hierarchy by the motorcycle and automobile.

Techno-futurists and Cycle Activism

Horton (2006) addresses the importance of the bicycle to the culture of contemporary environmental activism in the UK. However, there is another stream of activism that, using the cycle as an articulation of a more desirable future society, also incorporates a significant techno-fetishism in its approach to cycle technology. Creating, demanding and celebrating technological innovation in cycling, advocates of human power (epitomised by the recumbent cycle) signal their activities as an alternative to a carbased society. Events such as CycleVision in the Netherlands (http://www.ligfiets. net/cyclevision/), and the German Trade Show SPEZI (http://www.spezialradmesse. de/), together with magazines such as VeloVision (http://www.velovision.co.uk/) which is based in the UK but has an international readership, typify the vibrant cultural expression and innovative social and technological approaches of this techno-futurist perspective.

These events and networks create a significant alternative frame to the dominant one governing understandings of personal transport. However, their influence outside a relatively narrow audience is negligible: the mere existence of an alternative frame is insufficient to create change. Indeed, activists with a passion for unusual cycling technologies and working for increases in cycling provision as part of a sustainable transport future find themselves doubly alienated, as a marginalised group of actors within an already marginalised transport culture. Creating a new frame is only part of the process: it needs both dissemination and broader acceptability before change occurs.

Within efforts to promote innovative cycle technologies, there is sometimes a division between advocates of 100 per cent human powered vehicles and advocates of vehicles which use some additional form of motive power. Idealistic urban transport

visions of the future can tend towards car-fee utopias, perhaps in conjunction with public transport provision, rather than towards scenarios in which a fuller range of appropriate transport technologies is employed. The use of the term 'non-motorised transport' (NMT) in transport planning highlights the conceptual and ideological gulf between motorised and non-motorised options: one is either pro-cycling or procar. Even amongst cycle campaigners, there is commonly resistance to the use of motor assistance, as also to the suggestion that cycle technology and its 'derivatives' has any continuity with motorised transport, whether on two wheels or four.

In these either/or scenarios, the contemporary velomobile can be seen as the elite choice of certain cyclists. And when a velomobile involves the integral use of electric power, as in for example the Aerorider (http://www.aerorider.com/), its advocacy can provoke suspicion from cyclists whose identities as cyclists are defined by a vision of cycling as an act dependent solely on human power.

Dismantling the Evolinear Model Step 1: Cycle to Motorcycle

We are now in a better position to re-examine the construction of the mundane assumptions made in the formation of the transitions between cycle, motorcycle and car. Initially, the transition between cycle and motorcycle might be thought fairly obvious: the former is unpowered, the latter powered. Further distinctions and subcategories might be made by reference to the amount of power available.

But where, empirically, does the boundary between cycle and motorcycle lie? The EU regulates categorical distinctions on the basis of the wattage available (250 W) and maximum speed for the assist engine (25 km/h), below which thresholds the vehicle is defined not as a motorcycle but as an 'assisted cycle'. According to individual national laws, however, only certain forms of power are deemed viable to be used as 'assist'. A sub-250 W petrol assist, whilst practical, remains illegal in the UK. To note these confusions is not to argue that cycles and motorcycles are conceptually indistinguishable, but to suggest that their distinctions may best be conceived as an axis along which there are many possible stopping points. Between the fully motorised and the entirely pedal powered lies a range of limited power output vehicles, not just mopeds. Today, a range of 'e-bikes' (electrically assisted or powered cycles) fills the market niche once filled by petrol-driven motor-assisted pedal cycles (Méneret and Méneret, 2004).

Assuming we can set aside discussions over the relevant number of wheels, the continuum of cycle to motorcycle is a question of the variability of power and its source, from the smallest power assist, incapable of movement without pedal input, through mopeds to various categories of motorcycle.

Dismantling the Evolinear Model Step 2: Motorcycle to Car

The transition from motorcycle to car is morphological. Yet a motorcycle does not become a car simply by growing more wheels. Again, examination of vehicles that can be thought of as transitional between our conceptualisations of 'car' and 'motorcycle' may help to identify the ways in which we tend to distinguish the two. For example, the BMW C1 adds a degree of enclosure to a two-wheeler; the Peraves Ecomobile (http://www.peraves.ch/) is a fully enclosed feet first two-wheeler; whilst the Vandenbrink Carver (http://www.carver.nl/home.htm) combines three wheels and enclosed bodywork, but with its tilting mechanism it rides like a motorcycle. Cyclecars and light cars provide further historical illustrations of this boundary area.

Again, there is no simple evolutionary movement from motorcycle to car. The more we examine the range of vehicle possibilities, in both form and power, the less sustainable the evolinear model becomes.

This chapter's title deliberately highlights the velomobile as the locus of our discussion. It should be clear by now that the velomobile is not simply a 'special' cycle, any more than a car is a 'special motorcycle'. Yet the relationship between the two is undeniable. Similarly, the motorisation that distinguishes motorcycles from pedal cycles (through the intermediary position of the moped) is repeated in the potential transition between velomobile and automobile. A range of power-assisted options from the smallest power assist, through 'light cars' (a category recognised in UK law as requiring different driver and vehicle licensing), to those designs which we feel secure in allocating to the category of 'car' creates a continuum of possibilities.

Building a New Model of the Relationships between Transport Modalities

Replacing the evolution progression with four categories of vehicle, as depicted in Table 6.1, we can examine the relationships between them. The (vertical) shift between cycle and motorcycle involves the addition of power sources of various sizes. It is paralleled by the shift from velomobile to automobile. The (horizontal) shift from motorcycle to automobile is morphological, from an open to a closed form, from riding 'on' to riding 'in', and it parallels the shift from cycle to velomobile. However, partial enclosure and (re)movable bodywork blurs the morphological distinction, assisted power the motorisation distinction. In neither case is there a hard-and-fast dividing line which absolutely segregates one category from another. Replacing a linear progression with a two-axis matrix offers a more stable and less teleological model of personal transport options, one which may enable us to envisage those options without invoking the hierarchy of values implicit in the evolinear model. Different technologies offer potential solutions to contemporary mobility problems, and none is seen as 'more-' or 'less-' 'evolved' than any other. Within the matrix, velomobiles form a unique vehicle category integral to a comprehensive range of transport possibilities.

Cycling Cultures, Velomobiles and Opportunities for Change

Strong cycling cultures seem to encourage the production and use of velomobiles. The first period of serious pedal car use peaks together with the use of the bicycle in France, before and during the Second World War (Brühl, 2004, http://www.mochet. org). More recently, velomobiles have emerged especially in the Netherlands, notably the Alleweder and its derivatives (http://www.alligt.nl/, http://www.alleweder.de/),

	transport	organisation	of personal	
Motorcycle		Automobile		
Bicycle		Velomobile		

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especially the Mango and Quest (http://www.velomobiel.nl/). These observations suggest that the increased popularity of velomobiles currently depends on a broader growth in the popularity of cycling. But alternatively, reconceptualising the velomobile as something other than both the car and the bicycle might not only increase its social acceptability and uptake, but at the same time disturb and destabilise the dominant evolinear narrative of transport technologies in ways beneficial to cycling and modes of mobility attuned to sustainable futures in general.

Without a challenge to the currently dominant evolinear model, however, velomobiles remain simply a by-product of changing transport technologies, a special form of cycle. But in our new model the velomobile category, conceptually, is potentially so different that it can avoid direct confrontation with existing cultural meanings of motorcycle, automobile and bicycle. As an independent category, the velomobile takes on a new significance. Employed in this conceptual manner, it highlights further the possibility and necessity for the development of lighter, more efficient cars and can thus help shape debate over the choices to be made in future automobile construction and development.

The velomobile's current lack of an identity as a conceptually distinct vehicle category is evident in the legal limbo into which it, along with some light cars, falls. Unassisted velomobiles are legally just cycles, but dedicated cycling facilities are usually inappropriate for velomobiles. The lack of a conceptual framework by which to describe the velomobile is also frustrating to the designer who cannot make the product understood and evaluated on its own terms. In the evolinear perspective, the risk is that a velomobile will be perceived as an expensive, heavy, complex, large and difficult to park bicycle with extra wheel(s) and a body on top. For the velomobile designer, this is the equivalent of expecting a car to embody the benefits of a motorcycle, or of calling a car a 'four-wheeled, streamlined, recumbent motorcycle'.

The currently dominant evolinear model undermines the prospects for both the cycle and the velomobile. One of its assumptions is that the bicycle is a slow vehicle, long since overtaken by motorcycles and cars. This assumption results in considerable sums of money being spent on infrastructure projects designed for cycling as a slow, leisure activity, which can lead to unsatisfactory cycling infrastructure for the transport cyclist. In fact, the urban cyclist can move at an average speed higher than other forms of urban transport. So conceptual assumptions made about the bicycle can result in measures (such as route choice, surface dressings and access barriers) which explicitly reinforce those prejudices. 'Cycling' describes a range of activities in various settings, and which are not necessarily transferable or convergent (Cox, 2004). With their inherent aerodynamic efficiency, velomobiles are capable of higher sustained speeds than cycles, and especially challenge the image of non-motorised vehicles as 'slow'.

Claiming that it remains a valuable mode of mobility, cycling advocacy aims to reverse the discriminatory effects of evolinear assumptions. However, the majority of cycling promotion tends to centre on improving cycling infrastructures, providing cycle training and raising awareness of cycling's many benefits. Although there are signs of growing recognition of the benefits of folding and electric cycles, technological development of the bicycle is less often regarded as a key means of cycling promotion. Yet we would argue that sociotechnical development of the velomobile concept serves the goals of bicycle advocacy by aiding in the deconstruction and dismantling of the evolinear frame. The bicycle and velomobile combined make a stronger argument for cycling as valid and synergetic, yet separate, modes of transport, appropriate to a wider range of transport demands. As 'bodied' road vehicles, velomobiles clearly share infrastructure needs with other road vehicles, and can therefore reinforce the legitimate use of road space by nonmotorised vehicles. More velomobiles on the roads would certainly challenge both formally and informally existing conventions and hierarchies, and might increase respect and improve conditions for all modes of mobility attuned to the search for greater sustainability.

New Perspectives on Personal Transport

The assumptions embedded in the evolinear sociotechnical frame serve the continued dominance of the automobile in personal transport. The evolutionary metaphor projects the automobile as the latest and most appropriate stage in the development of personal transport, instead of sustainable mobility being the goal and the automobile providing just one among many means to that end. We believe that reconceptualising the velomobile can help in modifying the evolinear frame, and that the consequences of doing so go beyond increased acceptance of the velomobile per se.

Disrupting the assumptions of linear progress improves prospects for the development of intermediary vehicles. In the existing evolinear model, motorcycles can be dismissed as a mode of transport under the same rules of redundancy as the pedal cycle. In our new model, with the velomobile forming a fourth category of vehicle type alongside the cycle, motorcycle and automobile, the motorcycle is strengthened as an autonomous vehicle mode, and a host of intermediate forms currently marginalised and underdeveloped because they do not 'fit' the evolinear model appear as logical intermediaries between the four corners of the matrix. Currently, recumbent cycles struggle to gain acceptance under the established cycle frame; and automobile cultures find it almost impossible to move to lighter (and thus more efficient) vehicles because they do not fit expectations of what 'cars' should be. Microcars, moped cars and motor tricycles are in a very marginal position; they conceptually dangle in thin air without the velomobile category, as witnessed by their

ambiguous legal status. With the creation of a velomobile category, such vehicles gain a logic and rationale that suggests they can play useful roles in a sustainable transport culture. This range of marginal vehicle concepts, and the relationships between them, are depicted in Figure 6.2.

Each position in the matrix has its advantages and disadvantages: motorcycles are not 'better' than automobiles, they are just different. Likewise, cycling (human power), in the lower half of Figure 6.2 is not inherently better or worse than being motorised, it is just different, serving another set of priorities. Rid of its linearity, the model does not automatically point towards a predetermined, 'most-evolved' solution. This is a very basic, yet fundamentally new perspective on individual modes of transport.

Future visions for transport can incorporate a more balanced view where they consider the technological development of all options within this matrix. On the one hand, it becomes harder to defend the automobile as the *only* solution for all transport demands. On the other hand, the automobile is no longer the subject of hostility it tends to become within the automobile-centred evolinear perspective. In the new matrix, it is the inappropriate *use* of the automobile, rather than automobility per se, which comes more clearly to attention.

Should the velomobile sociotechnical frame become stabilised and the velomobile gain acceptance as a sensible mode of transport, there would be an increase in the acceptability of the whole spectrum of other human powered vehicles. Even the presence of a small but persistent number of velomobiles sufficient for everyone to have some personal experience of the phenomenon might serve to call into question the currently dominant form of automobility, and help individual transport

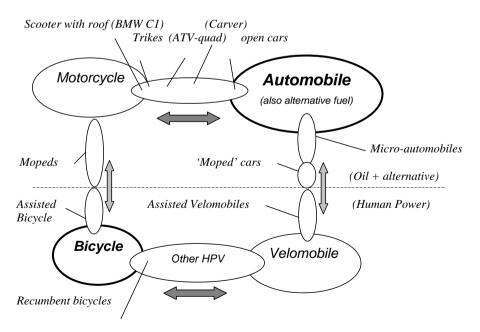


Figure 6.2 Vehicle concepts in relation to one another

modes to relate more logically to each other. But even if the velomobile does not become a widespread vehicle, its existence as a cornerstone concept could facilitate the social and cultural acceptability of alternatives. Lightweight automobiles and many human powered vehicles currently struggle to gain acceptability by trying to appeal as much as possible to the cultures of the established sociotechnical frames of the automobile and bicycle. As vehicle types depart from recognised 'norms' they become neither one thing nor the other, and unacceptable as either. Disrupting the expectations of these categories is fundamental to creating new possibilities for sustainable transport.

Conclusions

The evolutionary account of changing patterns in transport technologies has produced a number of unintended consequences. It has legitimised the marginalisation of nonautomobile road users. It has narrowed the scope of vehicle development. We find ourselves in the strange position of searching for sustainable personal transport solutions but only able to offer solutions which approximate to the automobile as the ultimate solution. By revisiting the assumptions behind the way we depict the relationship of the cycle to its own history and to the histories of other transport technologies, we can suggest another way of envisaging the future. Technological change happens, but the way we describe the changes is a matter of will. Bicycles don't evolve, they are constructed. The way in which we construct them and the choices we make matter profoundly.

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Chapter 7

Fear of Cycling

Dave Horton

Cycling has formed part of UK society for over a century. For much of that time, the bicycle was the most numerous vehicle on the roads, a major means of everyday mobility (Alderson, 1972; McGurn, 1999). But the amount of cycling in the UK has fallen dramatically and more or less continuously over the last half century; it accounted for 37 per cent of all journeys in 1949, but accounts for only around 1 per cent today (Department for Transport, 2002). The number of cycles bought has never been higher, yet the number of cycling trips made on UK roads has never been lower.

Across government, cycling is now seen as 'a good thing'. But despite growing pro-cycling rhetoric and policy in the UK, many people appear remarkably reluctant to 'get on their bikes'. Why? Discussion about impediments to cycling tends to concentrate on lack of good cycling infrastructure, such as cycling routes and cycle parking. Seemingly insurmountable barriers, such as hilly topography, high levels of rainfall and cold winters, are also considered influential (see Parkin, Ryley and Jones, this volume). But what about emotional barriers to cycling?

Numerous studies have shown fear to be a significant barrier to cycling (British Medical Association, 1992; Davies et al., 1997; Gardner, Ryley and TRL, 1997; Gardner and TRL, 1998; Pearce et al., 1998; Ryley, 2004). One study based on quantitative and qualitative research, *Barriers to Cycling* (CTC et al. 1997, 7), concludes 'the most prominent practical barriers perceived to be deterring potential cyclists were danger and safety'. The UK Department for Transport (2007, 2) reports that 47 per cent of adults 'strongly agree that "the idea of cycling on busy roads frightens me". Nor is fear of cycling confined to the UK. Gary Gardner (2002, 76) reports how, in 'surveys in three U.S. cities in the early 1990s, more than half of respondents cited lack of safety as an influential factor in their decisions not to cycle'. This fear of cycling impinges on cycling promotion; for example, one person who tried to encourage colleagues to cycle to work during National Bike Week notes that: 'Several people have criticised my efforts as irresponsible as cycling is "Dangerous" and by encouraging it we are putting employees at risk' (email to cycle-planning discussion group, June 2004).

So fear is an important *emotional* barrier to cycling. Yet this fear of cycling has been insufficiently analysed; many efforts have been made to challenge it, but few to understand it. This chapter aims to explore and better understand contemporary fear of cycling. I begin by setting fear of cycling in a wider context; we live in fearful societies and it is possible to fear cycling for many reasons beyond the fear of having an accident on which I concentrate, at least to begin with. I move on to critically examine some measures which are apparently designed to improve cycling's safety; road safety education, cycle helmet promotion, and the separation of cyclists from motorised traffic.

Later in the chapter I broaden my interest in fear, and attempt to make connections between the constantly produced fear of cycling and common media representations of 'the cyclist' as a figure to be feared. If the first half of the chapter tends to prioritise people's fears of the accident and physical injury via cycling, I here switch to consideration of people's existential fears, of having to negotiate with (their representations of) cyclists and with the possibility of themselves becoming a cyclist. I contend that fear of the accident and fear of being pushed towards cycling (and thus towards adopting a cycling identity, becoming 'a cyclist') are related, and together constitute contemporary fear of cycling. Cycling promotion needs to recognise and develop more effective strategies to overcome both these fears, of cycling as a practice to be feared and of the cyclist as a figure to be feared. I should perhaps make it clear, for what is to follow, that I write not only as a sociologist but also as a cycle campaigner.

The Complexities of Fear of Cycling

Before I concentrate my analysis on people's stated fears of traffic and accidents whenever they engage with the idea of being or becoming a cyclist, I want briefly to note how these are not the only fears of cycling. We know far too little about people's fears of cycling, but such fears certainly extend beyond fear of the accident. Fears of cycling may also include fear of being on view, of working one's (perhaps 'unsightly', perhaps 'sightly', certainly gendered) body in public, fear of harassment and violence from strangers (on safety fears of using cycle paths, see McClintock, 1992, 28; Harrison, 2001, 23, 35; Ravenscroft, Uzzell and Leach, 2002; Ravenscroft, 2004). The city is full of fear, which is partly why and partly because people move in cars. Increasing car use can be seen as a retreat from the 'public' world of the city, a means of cocooning oneself and one's family from 'the outside', from fear of traffic but also from dangerous places and people. Cycling puts the person back into this fearscape in a much less mediated way.

The car is experienced as an extension of the home for people (mainly women) who are fearful of public space (Davidson, 2003, 71, 102). In contrast, the bicycle affords no shield from the (masculine) gaze.¹ There is surely an existential vulnerability attached to performing physical activity in public space. Especially for novice and returning cyclists, the potential psychological barriers are massive; people are afraid of appearing inept, and (although this situation is thankfully changing) most people do not currently receive formal training in either how to ride or how to repair a bike. It is easy to trivialise someone's fear of feeling embarrassed and humiliated by

¹ There is an important tension here between apparent visibility and apparent invisibility. The 'I didn't see the cyclist' argument following a collision shows that even though people cycling feel very visible, in fact many car drivers simply fail to notice them. This inability of people in cars to see people on bikes is I think connected to cycling being 'out of place' on today's roads, something I discuss later in this chapter.

falling off a bike in public, but it is significant (although if you do want light-hearted examples, see Moore, 2002). Importantly, maintaining composure is harder for people perceiving themselves as 'under the watchful eyes of others' (Davidson 2003, 78). For many people, a fear of cycling in public no doubt forms a major barrier to cycling (and partly explains people's preference for pedalling static machines in gyms and at home).

Then there is fear of using one's body, of sensing one's body, of getting sweaty, of experiencing 'hard work', of hills. Other fears are more connected to issues of identity and include the fear of ridicule, of losing status, of riding a gendered, classed, raced and stigmatised vehicle, of undermining one's existing sense of identity; fear, in other words and as we will see later, of becoming 'strange'.

All these fears of cycling are socially, geographically and historically variable. Unequally socially distributed, they will tend currently in the UK to be greater among women than men, among those people riding with children than those without, and among ethnic groups with little history and experience of cycling. Unequally spaced, they will tend to be lesser in places with higher levels of cycling and where cycling is correspondingly closer to 'ordinary practice', such as Cambridge in the UK, or the Netherlands and Denmark. Fears of cycling also shift over time. High-wheeling cyclists feared 'coming a cropper'; in the late nineteenth century, many women undoubtedly feared the damage cycling might do to their respectability (Simpson, 2001; this volume); and today, we have this omnipresent fear of traffic.

Finally, before returning to specific focus on that fear of traffic, I want to note how fears of cycling in general are culturally embedded, and therefore hard to change. Fear is never a solitary emotion; it is not only constructed by wider social forces but also crucially mediated by key social relations. In such social relations, care and commitment are performed and demonstrated through advising someone against engaging in 'risky' behaviours. So that, increasingly rooted in a landscape of fear, exercising the agency required to choose cycling is undermined by other people's fears. The anxieties of family, friends and colleagues can all work against a desire to cycle, just as they can encourage currently more socially-acceptable demonstrations of care through car-dependent practices, such as the chauffeuring of children (Maxwell, 2001).

Existing Accounts of Fear of Cycling

Although below I explore how fear of cycling and more specifically a fear of traffic is constructed, I am not suggesting that fear of cycling is somehow wrong, or not real. To the contrary, we must recognise the realities of the situation currently confronting cyclists. The UK is a massively automobilised society (Sheller and Urry, 2003; Urry, 2004), its roads dominated by cars. Year on year, more vehicles take to the roads, and these vehicles keep getting bigger, and certainly for those on the outside more dangerous (on the SUV [Sport Utility Vehicle], see Vanderheiden, 2006).

Different studies demonstrate the increasing dangers faced by cyclists and pedestrians on our roads (Dean, 1947; Hillman, Adams and Whitelegg, 1990; Davis,

1992/93; Adams, 1995). A key insight of these studies is that advances in road safety tend to be unequally distributed. For instance, John Adams (1995, 125) argues that making the use of seat-belts compulsory 'had no effect on total fatalities, but was associated with a redistribution of danger from car occupants to pedestrians and cyclists'. Motorists wearing seat-belts are told they are safer and they start to feel safer. This increased sense of safety promotes an overall decline in standards of driving. Those on the outside of cars become objectively less safe, and therefore sensibly more afraid. Thus, 'cyclists and pedestrians have responded, and are likely to continue to respond, to the increasing threat of motorized traffic by withdrawing from that threat' (ibid., 125).

Fear has driven huge numbers of cyclists off UK roads (Hillman, Adams and Whitelegg, 1990). This downward trend in levels of cycling results in the remaining cyclists feeling less safe because those in a minority generally perceive themselves to be less safe than those in the majority. But these remaining cyclists are also objectively less safe, because other road users become less considerate of cyclists as cyclists become less common (and more strange) and as these road users themselves become less likely to also sometimes cycle. The more people who cycle, the safer cycling becomes; the fewer people who cycle, the more dangerous cycling becomes (Jacobsen, 2003).

In the context of a car-centred culture with low levels of cycling, then, fear of cycling might be seen as wholly appropriate. But despite its worsening context, cycling's advocates remain understandably keen to present a more favourable view. Typically, those promoting cycling attempt to counter perceptions of cycling as unsafe with 'objective' risk assessments. Thus, the risk of being killed while cycling on UK roads remains 'very low', or 'negligible'. Roads may not always be pleasant places to cycle, but they are still relatively 'safe'. This kind of claim is often accompanied by statistical analyses, which either demonstrate how unlikely it is for someone to die or be seriously injured whilst cycling, or favourably compare the risks of cycling with the risks of using other modes of mobility, particularly car travel, or even other leisure pursuits. Field (1994), for example, asserts that cycling is less risky than either cricket or horse riding. That such comparisons are not new demonstrates fear of cycling to be long-standing: a Cyclists' Touring Club leaflet of 1959, for example, states 'Your chances of being involved in an accident are 1 in 19 if you drive or ride on a motor-cycle; 1 in 32 if you drive or travel in a car; but only 1 in 155 if you ride on a bicycle' (Cyclists' Touring Club, 1959). On his cycle advocacy website, Ken Kifer states bluntly: 'The belief that cycling in traffic is dangerous is widespread but cannot be supported through accident and fatality statistics' (www.kenkifer.com/ bikepages/traffic/fear.htm, last accessed 4/2/07).

Another response to the perception of cycling as dangerous is to point out that *not cycling* is more dangerous; the health benefits of cycling easily exceed the small risk of death or injury, and non-cyclists forgo an important means of health and fitness (Seifert n.d.). The British Medical Association (1992) estimates the health benefits of cycling to outweigh the hazards by a factor of 20 1. In an article titled 'Is Cycling Dangerous?', Ken Kifer argues that 'cycling is much less dangerous ... [than] the fearmongers insist and ... has compensating benefits which are more

important than the risks involved' (www.kenkifer.com/bikepages/health/risks.htm, last accessed 4/2/07).²

So on the one hand, we have understandable fear of cycling based on people's perceptions of the risks of accident and injury. On the other hand, we have well meaning attempts to challenge these perceptions and the fear they generate. My concern here is that denial of cycling's danger tends too quickly to dismiss people's genuinely held fear of cycling, and effectively blocks consideration of other factors which may be involved in the construction of that fear. Therefore, this chapter does not take sides in the debate over whether cycling ought to be perceived as dangerous and thus as a practice to be feared. It instead follows another path, one which explores some of the mechanisms which might contribute to perceptions of cycling as dangerous, and thus to be feared. Jonathan Potter and Margaret Wetherell note how 'factuality can be understood as a situated product of a range of social practices', and we must attend to 'the procedures through which some part of reality is made to seem stable, neutral and objectively there' (1994, 50). We might therefore do better to try to understand the procedures which produce a fear of cycling.

Constructing Fear of Cycling

Fear of cycling belongs to a fearful culture (Massumi, 1993; Glassner, 2000). UK sociologist Frank Furedi (2002) argues that western societies have become dominated by a 'culture of fear'. We have never been so safe, yet never have we been so fearful. "Be careful" dominates our cultural imagination (ibid., viii). We belong to 'a culture that continually inflates the danger and risks facing people' (ibid., xii). 'Activities that were hitherto seen as healthy and fun ... are now declared to be major health risks' (ibid., 4). What is more, 'to ignore safety advice is to transgress the new moral consensus' (ibid., 4).³

Our fears are produced (Sandercock, 2002), which is why they are subject to such variation. Obviously, some fears take more work to produce than others. Most people fear a lunging shadow down a dark alleyway. Fewer people fear waste incinerators, nanotechnologies or the policies of the World Trade Organization (Goodwin et al 2001, 13) because those fears are more difficult to produce. Fear of cycling is neither inevitable nor 'natural' and needs similarly to be produced. It also always exists relative to other fears. For instance, cycling in London became substantially less fearful, relative to travel by bus and underground train, in the wake of the bomb attacks on public transport in July 2005; consequently the level of cycling increased significantly immediately after the bombings, but then dropped back down again (though remaining above its previous level) once people's fears of travelling by underground and bus had subsided (Milmo, 2006). Fear of cycling is most effectively produced through constructions of cycling as a dangerous practice. By saying that cycling is constructed as a dangerous practice, I am not denying that

² The tragic irony of these statements is that Ken Kifer was killed by a speeding drunk driver whilst out cycling in September 2003.

³ I have the increasingly common advice to 'always wear a cycle helmet' in mind here, and that is an issue which I will consider in some detail later in this chapter.

Cycling and Society

cyclists are really injured and killed on the roads; rather I am noting how people's fears of these (im)probabilities of injury and death are culturally constructed.

The rest of this section explores three ways in which cycling is constructed as dangerous, and thus a contemporary fear of cycling is produced; road safety education, helmet promotion campaigns, and the increasing separation of cycling from motorised traffic. The irony, of course, is that these interventions are responses to a fear of cycling, clearly aimed at increasing cycling's safety. But I will demonstrate how, contrary to intentions, each intervention actually tends to exacerbate fear of cycling, and sometimes literally invokes it in order to promote the 'solution'. Fear is also used for financial profit in the sale of safety equipment; for example, adverts for high visibility clothing cite the numbers of cyclists killed and injured on UK roads, and claim starkly, 'you must be seen' (www.vissiwear.com; last accessed 4/2/07).

Constructing Fear of Cycling, 1: Road Safety Education

With accelerating automobility, the tension between the street as a space for communal sociality and as a space for cars had, by the 1930s, become acute. The unruly social worlds of the street and the car's increasingly voracious appetite for space could not peaceably co-exist, and one or other needed to be tamed.⁴ Motoring organisations such as the Automobile Association and the Royal Automobile Club argued that children should be taught to keep out of the car's way, and road safety education was born, as an alternative to preserving streets for people (some local attempts were made to institute the latter, an early but not widely followed example being the Salford play streets scheme of the 1930s).

The transformation of streets for people into roads for cars, perhaps inevitably, produced death and injury. By 1936 concerns about the alarming rise in cyclist casualties had led to the idea of a cycling proficiency scheme, eventually adopted nationally in 1948 (CTC, 2005). To stem the carnage, cyclists must be trained to deal with the new, dangerous conditions. But things could have been otherwise. A 1947 book by J.S. Dean, former Chairman of the Pedestrians' Association, is instructive here. In his 'study of the road deaths problem', *Murder Most Foul*, Dean's basic tenet is that, 'as roads are only "dangerous" by virtue of being filled with heavy fast moving motor vehicles, by far the greatest burden of responsibility for avoiding crashes, deaths and injury on the roads should lie with the motorist' (Peel n.d., 3). Yet road safety education concentrates not on the drivers of vehicles, but on those who they have the capacity to kill. Dean saw how placing responsibility for road danger on those groups, and *Murder Most Foul* is a tirade against the placing of responsibility for road accidents on children.

The dominant assumptions on which UK road safety was originally based have remained in place. Today, rather than producing strategies to tame the sources of danger on the road, road safety education tries instead to instil in 'the vulnerable', primarily school children, a fear of motorised traffic, and then to teach them tactics

⁴ We will see later how also at this time a similar tension between the bicycle and the car was becoming pronounced.

to escape from road dangers as best they can. The title of the UK Government's highway code for young road users is *Arrive Alive* (Department for Transport, 2000a). The message such a title sends to children is not how much fun and freedom can be derived from sustainable modes of mobility such as cycling and walking; rather, it tells children that the world outside is a dangerous place, full of potential accidents, and they had better ensure they 'arrive alive'.

The introductory paragraph to Lancashire County Council's child cyclist training scheme, *Passport to Safer Cycling*, likewise seems deliberately designed to instil fear. It states how in Lancashire 'the number of cycle casualties reported to the police in 2001 totalled 421; of these 141 (33%) were children less than 16 years of age. Information from hospital casualty departments suggest that there are many more casualties that do not get reported' (Lancashire County Council, 2004). The stated aims of the scheme have nothing to do with pleasure (in fact, an objective is to help the child 'understand the difference between riding and playing on cycles'), or with thinking about and attempting to change the current uses of the road. On the contrary, they focus firmly on the practices and psychology of the individual child: 'to encourage and develop safe cycling' and 'to enable trainees to consider their personal safety and develop a positive attitude towards other road users' (Lancashire County Council, 2004).

Roads are full of danger, and it is children who must be afraid and take care. Road safety educators inculcate 'safety-consciousness' in various ways: they provide children with a variety of reflective gadgets; children are encouraged to wear high visibility clothing and cycle helmets; and exercises in road safety literature teach children to walk or cycle by convoluted routes because they are 'safer' (see Department for Transport, 2000b). The road safety industry thus strives to reduce casualties by inculcating fear in children, and giving them not incentives but disincentives to walk and cycle.

A minority alternative approach, road danger reduction, concentrates instead on making travelscapes less dangerous per se, by for example, reducing the numbers and speeds of cars, and improving enforcement of speed limits. In other words, current road safety education, perhaps reframed as citizenship studies in mobility, could be very different. We do not have to teach tomorrow's adults to fear cars, or to adapt to the inevitability of motorised metal objects tearing through their lives by incarcerating themselves in such vehicles (Hillman, Adams and Whitelegg, 1990). The Cyclists' Touring Club fought through the first half of the twentieth century against the compulsory use of rear lights by cyclists. One leaflet from the 1930s (Cyclists' Touring Club, n.d. a) states that the 'use of any rear warning weakens the sense of responsibility of the driver of an overtaking vehicle to avoid running down a vehicle or pedestrian in front of him'. We could educate children into putting such lost accountability onto the car. The relevant argument, then as now, is that danger comes not from cycling, but from cars. The compulsion on the cyclist to 'be seen and be safe' puts the onus to change on the wrong group. The resonance with the highly controversial contemporary issue of helmets is clear.

Constructing Fear of Cycling, 2: Helmet Promotion Campaigns

Like road safety education, campaigns to promote the wearing of cycle helmets effectively construct cycling as a dangerous practice about which to be fearful. Such campaigns, and calls for legislation to make cycle helmets compulsory, have increased over the last decade. In 2004, a Private Members' Bill was tabled in the UK Parliament, to make it an offence for adults to allow children under the age of 16 to cycle unless wearing a helmet. Also in 2004, the influential British Medical Association, in a policy turnaround, voted to campaign for helmets to be made compulsory for all cyclists (for comprehensive detail on these developments, and debates around cycle helmets in general, see www.cyclehelmets.org). Helmet promotion, especially to children, has become an established part of the UK road safety industry. In 2005, Lancashire County Council's road safety team ran a 'Saint or Sinner?' tour, with anyone cycling without a helmet deemed sinful; sinners were given the opportunity to repent by pledging to 'mend their ways', and always wear a helmet when cycling (Lancaster and Morecambe Citizen, 2005).

Helmet promotion is hugely controversial among UK cycling organisations (Hallett, 2005). The 2004 Parliamentary Bill was unanimously opposed by the cycling establishment, with every major cycling organisation and magazine rejecting helmet compulsion (Cycle, 2004). The groups opposing the Bill included CTC (formerly The Cyclists' Touring Club, and the UK's largest cycling organisation), London Cycling Campaign, the Cycle Campaign Network, the Bicycle Association, the Association of Cycle Traders, British Cycling, Sustrans and the National Cycling Strategy Board. These groups are not anti-helmet, but argue for the individual's right to choose. This section cannot hope to do justice to the various arguments for and against (the imposition of) helmets, which can anyway be found elsewhere, but key issues include:

- *Efficacy at the individual level.* Does wearing a helmet reduce or increase the risk of sustaining a head injury? Here there are three relevant concerns. First, the technical capacities of helmets, which are designed only to resist low-speed impacts, and only then if correctly fitted (Walker, 2005). Second, the concept of risk compensation which suggests that both cyclists wearing helmets and motorists in their vicinity possibly take less care (Walker, 2007), which therefore increases the likelihood of collision; in implicit recognition of the existence of risk compensation, the Royal Society for the Prevention of Accidents in its leaflet, *Cycle Helmets*, feels it necessary to caution 'Remember: Helmets do not prevent accidents ... So be just as careful' (RoSPA n.d.). Third, the greater size of the head, and so increased probabilities of impact, resulting from wearing a helmet;
- *Efficacy at the aggregate level.* Do helmet promotion campaigns make cycling more or less safe, overall? There is evidence that cycling levels decline when helmets are promoted and collapse when they become compulsory (Liggett et al 2004, 12). Australia, the first country to make cycle helmets compulsory, witnessed a post-compulsion fall in levels of cycling of between 15 and 40 per cent (Adams, 1995, 146). According to 'the Mole' (2004, 5), in Melbourne

'compulsion reduced the number of child cyclists by 42% and adults by 29%'. Because cycling tends to be safest where there are many cyclists (Jacobsen, 2003), and most dangerous in places with few cyclists, and because helmet promotion campaigns reduce the overall numbers of cyclists, helmet promotion increases the risk of cycling. The relationship between increased cycling and increased safety appears to be confirmed by the experiences of the Netherlands and Denmark, which have high levels of cycling, very low rates of helmet wearing, and low rates of death and serious injury among cyclists;

• *Equity*. Hillman (1993) claims that cyclists are at lower risk of head injury than motorists, pedestrians and children at play, yet none of those groups is encouraged to wear helmets (see also Kennedy, 1996). Risk theorist John Adams suggests that equitable application of the logic applied to cycle helmet promotion would result in 'a world in which everyone is compelled to look like a Michelin man dressed as an American football player' (1995, 146)!

This should be sufficient detail to indicate why the issue of cycle helmets creates so much interest and controversy among health promotion and accident prevention experts, as well as cyclists. But in the context of my overall argument, my chief point here is to note how helmet promotion campaigns play on people's existing fear of cycling, and contribute to the reproduction and magnification of that fear. One recent UK Government campaign demonstrates my claim in a particularly vivid way.

In 2004, the UK Department for Transport launched 'Cyclesense', a multi-media 'teenage cycle safety' campaign centred on a series of images of skull X-rays and helmets (see www.cyclesense.net; last accessed 4/2/07). Various captions accompany the different images of the helmet-wearing skulls. The script alongside X-ray 01 reads: 'It's no joke: cycling is a fun, convenient and healthy way to get around but if you don't follow basic safety guidelines the results could be very unfunny' (Figure 7.1). It continues that 'in 2001 nearly 3000 cyclists between 12–16 were



Figures 7.1 & 7.2 X-ray images used in the UK Department for Transport's 'Cyclesense' helmet promotion campaign, see www.cyclesense.net

killed or injured on the roads. If you want to protect yourself you must take your cycle safety seriously'. The text accompanying X-ray 02, a helmeted and apparently laughing skull, reads: 'It's no laughing matter', before insisting 'Get yourself a helmet. No joking in a study of admissions to an A&E Department nearly 50% of injuries suffered by cyclists were to the head and face' (Figure 7.2). Elsewhere on the Cyclesense website, on the 'Protection' page, the text reads: 'If you like your face and head the way it is, then wear a helmet!'.

These captions make clear the central and over-riding message of the campaign; if you want to cycle and keep your skull intact, you *must* wear a helmet. The campaign portrays cycling as dangerous, and instils fear. CTC responded angrily to the images. A rare letter to all members from CTC's Director, Kevin Mayne (2004), set out potential consequences of the imagery; children could be frightened from cycling, and their parents and teachers might feel reluctant to let them cycle. Mayne writes: 'CTC believes [these images] will do huge damage to the perception of cycling as a safe, enjoyable, healthy activity'; and such campaigns 'raise unfounded anxiety about the "dangers" of cycling, and are known to drive down cycle use'. Against the context of broad governmental support for cycling, Mayne's tone becomes incredulous:

Images which link cycling with X-rays of skulls can only mean one thing if you cycle you will end up hospitalised or dead. *What sort of message is that to give to young people?* ... *The last thing the Government should be doing is frightening children into NOT cycling!* (Mayne, 2004, original emphasis)

Of most relevance here is that every call for cyclists to wear, or be forced to wear, helmets demands the association of cycling with danger, and thus the production of fear of cycling. Whilst I am happy to align myself with CTC's position, my wider point is that the promotion of cycle helmets is just one more way in which a fear of cycling is constructed. People with experience in the politics of cycling might realise how controversial are calls for cyclists to don helmets, but the majority of people in societies such as the UK are much more likely to take such campaigns at face value, and to be surprised by those of us who adopt a more sceptical line (although scientific research into how different audiences receive helmet promotion campaigns is clearly required). In other words, even in this, the most contentious of areas, constructions of cycling as a dangerous practice, and thus the production of fear of cycling, proceeds for the most part in a remarkably insidious way.

Constructing Fear of Cycling, 3: New Cycling Spaces

We might suppose that fear of cycling has become locked into a downward spiral from which it seems almost impossible to break, *unless* the practice of cycling can be spatially relocated, and performed under 'new', 'safe' conditions. This section examines recent attempts to create such new, safe cycling spaces (for a recent overview, see Franklin, 2006).

For most of the twentieth century, the great majority of cycling in the UK took place on roads. The dominant, widely shared assumption was that (declining numbers of) cyclists shared space with (increasing numbers of) cars, trucks, buses and taxis. Riding in an environment dominated by potentially lethal motorised modes of mobility was a taken-for-granted, normal part of cyclists' ordinary experience. But over the last decade or so, a fundamental shift in cycling policy and infrastructure has occurred. Cycle lanes have been introduced across the length and breadth of Britain. Many cycle lanes are 'on-road'; the use of white lines and coloured paint is intended to mark a boundary between space for motorised traffic and space for cyclists. Although often criticised and sometimes ridiculed (for example, see the 'cycle facility of the month' pages at www.warringtoncyclecampaign.co.uk; last accessed 4/2/07), at its best this infrastructure aims to make cycling journeys more attractive; quicker, easier, safer, more pleasant.

In the UK, recent years have also seen major development of off-road cycling routes, shared not with motorised traffic but with people walking, dogs and horses (for details, see Cotton, 2004). Many such routes have been developed and promoted by Sustrans, a charitable organisation committed to encouraging sustainable transport (see Sustrans, 2000; www.sustrans.org.uk). These routes are emerging most explicitly around the figure of the cyclist, and they have certainly boosted interest and participation in cycling (Peace, 2004; Sustrans, 2006). However, an unintended consequence of their popularity may be that the dominant public perception of cycling is becoming of an activity which best occurs in 'safe' and pleasant places (on disagreements around this issue within cycling policy circles, see Rosen, 2003; Jones, 2004). 'Normal' roads are no place to cycle; they are to be feared.

It is worth noting here the long-standing contentiousness, among British cyclists' organisations, of off-road cycling routes. The decades spanning the middle of the twentieth century saw British roads struggling to accommodate the car and the bicycle harmoniously. A pamphlet produced by the Cyclists' Touring Club and titled Road Safety: a fair and sound policy (n.d.b [c.1935]) states: 'It is often said that there is not room on our present roads for everybody and so the cyclist should be removed. The only traffic that cannot safely use our present roads is high-speed motor traffic, for which special highways should be provided'. In the ensuing battles over which group of users should be 'pushed off' the roads, cyclists eventually 'won', with the development of the motorway network for which they had long campaigned. However, the rapid growth in levels of motorised traffic meant that there was no going back to 'the golden age' of cycling which they presumably had hoped the provision of motorways, by taking cars off existing roads, would enable. The organisational views expressed in the 1930s, during cyclists' resistance to the idea that cycling should be relocated to cycle paths, ought perhaps to provoke reflection on the situation today. For instance, in Making the Roads Safe: The Cyclists' Point of View, we find the following:

It is impossible to escape the conclusion that most people and organisations who advocate cycle paths are not actuated by motives of benevolence or sympathy, although they may declare that their sole concern is the welfare of the cyclist ... A great deal of the cycle-path propaganda is based on a desire to remove cyclists from the roads. That is why the request for cycle paths is so often accompanied by a suggestion that their use should be enforced by law. Therein lies a serious threat to cycling. (Cyclists' Touring Club 1937, 11–12)

Cycling and Society

Of course, the situation today is different. Perhaps most obviously, many people who fear cycling on the roads apparently desire to cycle elsewhere. Unsurprisingly, forms of off-road cycling not only leisure cycling on 'traffic free' routes, but also BMX, mountain biking, cyclo-cross, trials riding and track all seem to be gaining in popularity. And with the expansion of places to cycle off-road, the expectation grows that such places are *the places* to cycle. The road stops feeling like a place to cycle; it begins to feel as though cycling does not belong there. The institutionalisation of this sensibility, anticipated by cyclists 70 years ago, is potentially not far behind. In 2006, the draft of the revised Highway Code instructed cyclists to use off-road routes wherever they exist. These planned revisions were opposed by cyclists, led by CTC, but they nonetheless make clear how the provision of 'attractive' alternatives produces the cyclist-on-the-road as ever more out-of-place. New ideas of 'normal' are being produced, and it is becoming less normal to see roads as appropriate places to cycle.

Meanwhile, riding on the road becomes an ever more fearful prospect for ever more people. Without any necessary objective change in the conditions prevailing on the roads, the provision of off-road routes increases people's fear of on-road cycling. Further, the promotion of such routes tends to feed (on) this fear. Sustrans' publicity material, for example, makes regular use of an adjective which has assumed enormous power in UK cycling promotion; 'safe'.⁵ One recruitment leaflet calls on people to 'help us build *safe* attractive cycle routes in your area' (Sustrans n.d., my emphasis).

Arguably therefore, today's youngsters are growing up with the expectation that, if they cycle at all, it will be away from cars. It would of course be wrong to see these shifting sensibilities as unopposed. Cycling advocates are increasingly insistent that today's youngsters must be trained to ride on the roads, and government funding towards that aim has recently been forthcoming. But tensions around the proper place of cycling constitute a major new battleground of mobility and sustainability conflicts in the twenty-first century. It is also worth noting, for what is to follow, that spatial re-allocation of cycling away from the road is shifting the object of fear, from cycling to the cyclist. On off-road routes, the cyclist is no longer so viscerally threatened and endangered, and instead becomes perceived as the source of threat and danger to slower-moving, more leisurely others. The source of fear shifts from the practice to the practitioner.

Before continuing on the theme of fear of the cyclist, I want briefly to summarise this section. The road safety industry, helmet promotion campaigns and anyone responsible for marketing off-road cycling facilities all have a vested interest in constructing cycling particularly cycling on the road as a dangerous practice. Cycling, in other words, is made 'dangerous' by these attempts to render it 'safe'. Each of the cases I have discussed is (perhaps unwittingly) therefore implicated in

⁵ Another Sustrans project is 'Safe Routes to Schools', which aims 'to create a Safe Route to School for every child in the UK' (see www.sustrans.org.uk; last accessed 5/2/07). This project might have been called 'Nicer Routes to Schools', 'Better Routes to Schools', or 'Fun Routes to Schools'. That it was not again testifies, I would claim, to the salience of 'safe' as an adjective in a contemporary transport climate characterised by fear.

the production of a fear of cycling. This fear of cycling stops people cycling, and stopping people from cycling is an effective way of continuing the reproduction of a fear of cycling. But now I want to tackle more directly something at which up until now I have only been hinting, the potential relevance of a fear of the *cyclist* to a fear of cycling.

Making Cycling Strange

I am now switching from thinking about a fear of cycling which is produced from constructions of cycling as inherently dangerous, and thinking instead about how the identity of 'the cyclist' tends to invoke fear. There is undoubtedly scope for using psychoanalytic theories here, and in particular ideas to do with projection and transference. But I do not venture far into that territory in the remaining part of this chapter, and draw instead on Georg Simmel's classic sociological account of the stranger (1971 [1908]), as well as more recent sociological work on stigma (Goffman, 1968), stereotyping (Pickering, 2001) and scapegoating (Cohen, 2002 [1972]).

In the UK during the twentieth century, cycling gradually moved from being a major mode of mobility to being a minor one. As the volume, speed and dominance of motorised vehicles grew, cycling was designated ever more marginal road space. We have seen that the impulse to altogether eliminate cycling from the road only succeeded on motorways, for which cycling organisations campaigned. Nevertheless, cycling was everywhere else reduced to a practice taking place on the edges of a transport infrastructure which increasingly centred on the car. Automobility's massive power is well expressed by its current monopolisation of space.

The seemingly taken-for-granted dominance of automobility saw UK cycling in a perilous state across the latter third of the twentieth century.⁶ By the century's end, cycling was spatially in the gutter. The spatialities of a practice always have implications for people's identities (Lefebvre, 1991; Shields, 1991; Sibley, 1995). If cycling was spatially in the gutter, then so were cyclists' identities. Cycling, and most especially urban utility cycling, had become a polluted and polluting practice and 'the cyclist' a polluted and polluting identity.

The cultural acceptability of cycling's spatial marginality, particularly when combined with the cyclist's stigmatised identity, is highly consequential. It means that those cyclists who do not stick to the margins, but either consciously or unconsciously attempt to 'centre' themselves, are experienced as threatening and unsettling, and are demonised most visibly and powerfully within the mass media. So cyclists' collective protests, such as Critical Mass, are particularly vilified (Carlsson, 2002). But even the least 'political' of cyclists will sometimes break from the invisibility of the margins and therefore inadvertently challenge automobility's

⁶ The negative consequences of automobility's monopoly on space were/are not of course confined to cycling. Automobility has led to much public space that was once common space being allocated to traffic flow. So community severance (and by implication the marginalisation of community-based use of space) is an important problem here, not just the marginalisation of cycling.

spatial monopoly. This cyclist can execute a whole range of manoeuvres designed to take short-cuts, avoid hold-ups and escape danger. It should be stressed that many such movements, whether actually 'illicit' or simply unavailable to people in cars, are risk reduction strategies, tactics developed by cyclists to reduce conflicts and risks of collision with others. But unlike road safety education, helmets and new cycling infrastructure, many are not officially sanctioned and are therefore not regarded as wholly legitimate. Those very same tactics which have enabled cycling to survive as an urban practice can also therefore reinforce the cyclist's already stigmatised identity.

The mass media is very alert to the potential of the cyclist's stigmatised identity to make 'a good story', especially in a social context which increasingly encourages people to reflect on transport choices and question their own automobilised lives (see below). Newspaper editors are attuned to knowing what their readers and advertisers want (and we should note how a high proportion of those advertisers belong to the system of automobility, on whose revenues newspapers depend). Media accounts are therefore likely to reproduce dominant representations of the cyclist as a 'yob', law-breaker and outsider (for example, Hoey, 2003; see also Fincham, this volume). Such stereotyping works by isolating certain behaviours, stripping them from their meaningful context, and attributing them to 'everyone associated with a particular group or category' (Pickering 2001, 4). And these stereotypical representations contribute to the maintenance of the cyclist as a strange 'other' Field (1996); Basford et al. (2003); Dickinson (2004); Reid (2004).

Against the context of socially and ecologically destructive automobility, the reproduction of concerns about cyclists' behaviour is a classic example of scapegoating (Cohen, 2002). Scapegoating deflects attention away from greater crimes, by in this case sacrificing the cyclist in the ideological pursuit of 'motoring-as-usual'. Through representing the marginal practice of cycling as 'deviant', the dominant practice of car driving is reproduced and reaffirmed as 'normal'. Representations of cycling as deviant and cyclists as outsiders both contribute to, and are facilitated by, low levels of cycling which mean that few people are able to take, and defend, the cyclist's point of view.

But times are changing. Cycling has become strange, and the cyclist has become a stranger. Yet there is an intense ambivalence about the stranger (Simmel, 1971). The stranger's presence suggests the possibility of another way. Against a backdrop of increasingly vocal concerns about climate change and growing unease about 'the car', the cycling stranger embodies the possibility of a different social order.

So here is another challenge to cycling as a marginalised practice and the cyclist as a stigmatised identity. But this time it is not Critical Mass or aberrant cyclists who, by moving from the margins to a more central position, are issuing the challenge. It is governments. More accurately, it is transport discourse and policy, which especially in light of a range of social and environmental 'problems', is now pushing cycling back towards 'the centre'. UK Government transport policy (most notably Transport for London) is recognising cycling as 'a good thing', and making it clear that people should give cycling a go. The mass media, albeit at its more progressive end, is also now representing cycling in more positive terms. On 7 June 2006, the front page of one UK newspaper, *The Independent*, featured an image of the front wheel of a bicycle alongside the headline 'Revolution! Britain embraces the bicycle' (Milmo, 2006).

For the last third of the twentieth century, the cyclist was relegated in favour of the motorist. But the cyclist is coming back. And again, it is experienced by many people as a threat. The radical separation of the cyclist from the motorist within UK society returns as an unsettling haunting. The push to bring cycling in from the margins suggests that car-centred lives will not continue forever. Forcing an encounter with the idea of oneself as a cyclist, it provokes fear of cycling. So my argument is not only that a fear of cycling is produced by varied attempts to make cycling safer, but also that a fear of the cyclist is related to people's anxieties that they, too, might end up taking to cycling, and becoming a 'cyclist'.

Conclusions

Fear of cycling constitutes a significant emotional barrier to cycling. Ironically, this fear is partly produced through attempts to make cycling safer. For as long as cycling remains something to fear, it remains a marginal and marginalised practice. The constant cultural construction of cycling as dangerous justifies the continued spatial marginalisation of cycling practice, which then enables the continued construction of the cyclist as other, a stranger pedalling on the margins. The ideological, spatial and cultural marginality of cycling are continuously reproduced, together.

But cycling is pedalling in from these margins. There are admittedly tentative signs of a cycling renaissance. A range of actors is today seeking to elevate cycling's position in transport policy, to move it into the mainstream. If this push continues into the future, we may well see people's anxieties, about change away from currently dominant automobility, increasingly projected onto the cycling stranger (Sandercock 2002, 205; Sigona 2003, 70). As people feel increasing pressure to get on bikes themselves, and thus really start to engage with the realities of currently dominant cycling conditions, we may also hear more cries that cycling is too dangerous. People's fears of cycling will become more real and powerful as the prospects of their cycling grow greater. And people will feel and fear the loss of a way of life as it has come to be lived, as automobilised. When these anxieties become intense and the calls that cycling is too dangerous become really vociferous, we should I think take them as a sign that as a culture we are getting really serious about once more getting on our bikes.

In the meantime, what can be done to allay people's fears of cycling? Although it is constantly produced and reproduced, fear of neither cycling nor the cyclist is inevitable. Both the conditions for cycling practice and representations of the cyclist can change and be changed, and thereby produce different effects. Many people who cycle today racing cyclists, touring cyclists, cycle campaigners, bike messengers

belong to cycling cultures which produce and reproduce positive experiences and representations of cycling. These people may be aware of constructions of cycling as something to be feared, and of the cyclist as deviant and strange, but such negative representations are easily exceeded by the celebratory and confirmatory evaluations of cycling and the cyclist continually flowing through their specific cultural worlds. Correspondingly, we can in varied ways promote a pro-cycling culture. At the level of representation, our task is to generate and continuously reaffirm positive representations of cycling as an ordinary and enjoyable practice, something I am pleased to see happening in, for example, the recent marketing campaigns of both Transport for London and Cycling England. Certainly, we must stop communicating, however inadvertently, the dangers of cycling, and instead provide people with very many, very diverse, positive and affirming representations of both cycling identities. Current fear of cycling can be otherwise, but we must help make it so.

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Chapter 8

Men, Women and the Bicycle: Gender and Social Geography of Cycling in the Late Nineteenth-Century

Phillip Gordon Mackintosh and Glen Norcliffe

Social geographers have spent much of the last two decades investigating the influence of gender on geography. They have sought specifically to understand the spatial effects of the social construction of femininity and masculinity in both contemporary and historical societies. On the strength of countless studies, geographers of gender confidently assert the efficacy of gender in and on the social production of space, place, landscapes, and environments.¹

This chapter demonstrates the gendered construction of space and society, especially as it concerned cycling in the late nineteenth century, which shaped Victorian understandings of not only cycling, but the spaces and places where it occurred. The spaces through which cyclists so visibly passed included the streets, roads and highways, paths, parks and parkways of Victorian cities and countrysides, while the places where they reinforced their identities included club-houses, photographers' studios, racetracks and gymnasia.² Men and women on bicycles, particularly in the 1890s, undertook a purposeful occupation of these urban and rural geographies (Mackintosh and Norcliffe, 2006). In so doing, cyclists also promoted well-established constructions and divisions of gender (Kerber, 1988; Vickery, 1993). Many women, in an age marked by conspicuous consumption (Horowitz, 1985; Abelson, 1989), interpreted the safety bicycle (primarily a technology of class privilege; Mackintosh and Norcliffe, 2006) as a domestic vehicle for 'ladies,' well suited to what Mackintosh (2005) has called the 'domestic public'. Bourgeois men tended to express masculinity and masculine activity in opposition to the increase of urban effeminacy (Carnes and Griffen, 1990; Chauncey, 1994; Kimmel, 1996; Ditz, 2001); the conspicuous use of the highwheel bicycle can be regarded as an overt expression of 'cavalier masculinity' (Norcliffe, 2006), and a resistance to bourgeois

¹ The gender of geography is well established. Readers interested to locate this literature would do well to peruse good social or cultural geography textbooks, such as Valentine (2001), or Mitchell (2000).

² Geographers differentiate between space and place. An oversimplification will help non-geographers distinguish between the two: *space* tends to identify absolute, relative and cognitive spatial structures, *place* the dynamism of unique and interdependent spatial and social processes.

domestic propriety. Apparently, women and men used the bicycle as both a form of transportation and a means of gender distinction.

We begin with a brief historiographical account of Victorian gender construction, establishing the bifurcated vet overlapping nature of Victorian gender division, particularly as it applies to feminist and masculinist interpretations of cycling in the late nineteenth century. We then move to a concise discussion of the connection between gender and bicycle and tricycle technology. This frames the discussion that follows, which emphasises a bourgeois masculinist phase of cycling that took place throughout the 1870s and 1880s, and includes male bicycle clubs such as the Montreal Bicycle Club and its codification of masculine cycling behaviour for a generation of highwheelers. Lastly, and in fascinating contrast with Simpson's account of late nineteenth century women's racing cycling (Chapter 2, this volume), we discuss how women's use of bicycles in the fin de siècle illustrates a bourgeois feminist attempt to domesticate cycling and its geography. A close reading of late Victorian domesticator, Frances Willard's, A Wheel within a Wheel: How I Learned to Ride the Bicycle (1895) intimates that many women cyclists promulgated a mode of cycling that fit the new bourgeois domestic construction of moral and aesthetic probity in and of space and place.

Bourgeois Victorian Gender and Geography

The academic study of gender, once emphasising the singular study of women and feminism, now includes research into men and masculinism. Scholars acknowledge the mutual inclusivities of gender relations to account for gender reciprocity in the lived experience of women and men. As feminist geographer Domosh (1997, 229 230) suggests, historical women and men often do not act alone, but instead 'implicate' each other in their social arrangements. Indeed, gender 'identities are formed in relation to their opposite, and no experience and hence, no landscape

can be seen as totally feminine or masculine, without in someway including its opposite'. It seems, then, that a discussion of Victorian men and women cyclists and their geographies must recognise gender opposition; men and women rode wittingly or unwittingly mindful of each other and gender ideology. The following briefly explains the relationship between bourgeois gender and geography in the Victorian era and contextualises our examination of men and women in this chapter.

Contemporary popular culture largely misunderstands the social geography of Victorian women. It is still not widely known that women had occupied the streets of North American cities since the eighteenth century (Stansell, 1987; Ryan, 1990; Gilfoyle, 1992). Studies of historical women generally depict two types of Victorian women: firstly, the bourgeois and aristocratic women who used cognitive mapping to govern their movements in and around the public and semi-public places of Victorian cities (Ryan, 1990; Strange, 1995; Deutsch, 2000; Rappaport, 2001; Domosh and Seager, 2001 (some of these women, who engaged in urban and social reform

'scrutiny', constitute exceptions (Mackintosh, 2005));³ and secondly, the 'working class' women, who used the streets as part of their everyday survival strategies that included everything from scavenging to prostitution to leisure-seeking (Peiss, 1986; Stansell, 1987; Strange, 1995). The point to note here is that nineteenth-century women were not geographically hamstrung by domestic ideology. Even those most spatially vulnerable, the working class women performing out-sourced labour for many hours a day in their marginal tenement homes, walked the streets in the evenings on behalf of local voluntary reform organisations (Mackintosh 2005, 35–36).

Ironically, Victorian masculinity has been shown to originate in part in this very public presence of women. A feminisation of culture and geography in the nineteenth century helped transform northern North American culture from its proclivity for masculinist Calvinist Puritanism in the eighteenth century to feminist evangelical Protestantism in the 19th (Douglas, 1978; Bushman, 1993; Johnson and Wilentz, 1994). Women throughout the century accrued authority as arbiters of morality, civility and religious piety. Their influence as shapers of civic and national probity derived from bourgeois domestic ideology's conception of women as mothers of the 'race', mothers of the 'future of the race' (Bacchi 1979; Valverde 1991; Kline 2001: 7–31), and women as facilitators of *embourgeoisment* (Mackintosh, 2005). In a new capitalist order that demanded from bourgeois men an allegiance to work and capitalist production, and from women the oversight of both the family and the domestic economy, bourgeois culture increasingly affirmed that mother and women knew best (Johnson, 1978; Stearns, 1979; Ryan, 1981; Rotundo, 1993).

Such privileging of women increased feminisation and, importantly, domestication, prompting a 'masculinity crisis', though the precise nature and timeline of this crisis is continuously debated by scholars of masculinity (Carnes and Griffen, 1990; Griffen, 1990; Testi, 1995; Kimmel, 1996; Ditz, 2003). Victorian men developed fears and anxieties about the rise of effeminacy perpetuated by this extant feminisation, about 'over-civilization' and corporeal 'softness', and even about the perception of a diminution of white male power that a modernised and racialised urbanity imposed on a post-agrarian industrial society (Dubbert, 1980; Lears, 1981, 47-58; Kimmel, 1987; Carnes, 1989; Carnes, 1990; Griffen, 1990; Chauncey, 1994, 111-127; Bederman, 1995). As the crisis thesis goes, the masculinity of these men, whose urban lifestyle disregarded the bodily ideal of the yeoman, depended on their ability to produce sufficient incomes to warrant their families' bourgeois status (Rotundo, 1993, 168–169). Scholars traditionally refer to this economic construction of gender as 'self-made manhood'. Its persistent demand on husbands and fathers to succeed at all cost kept them away from home and child-rearing, leaving the supervision of the home and its occupants to wives and mothers, though important

³ We use Peter Gay's (1998, 6) definition of 'bourgeois' here. To be bourgeois was to work zealously both to emulate one's perceived class-superiors and to reject the status and attributes of one's class-inferiors, those below the line that separated the middle from the lower classes.

work has shown that certain suburban domestic males resisted this generalisation (Marsh, 1990; Frank, 1998; Tosh, 1999).⁴

Bourgeois women's femininity combined maternalism and consumption to produce Victorian domestic ideology. Demonstrating their commitment to bourgeois culture, women used their husbands' wages to purchase respectability as they wrestled with the edicts of conspicuous consumption and domestic ideology, which were largely synonymous (Horowitz, 1980, 1985; Wright, 1980; Leach, 1984; Abelson, 1989). This obligation to bourgeois domestic and evangelical Protestant (Hanson 1981, 60) ideology made women 'not only domestic but domesticators, expected to turn their sons into Christian gentlemen, dutiful, well-mannered, and feminized ... it increasingly fell to women to teach their sons how to behave like men' (Kimmel, 1996, 60). Accordingly, the masculinity crisis thesis contends that boys learned a feminised version of masculinity from women. Boys and men countered this feminisation in numerous ways, including interpreting masculinity through 'boy culture' (Rotundo, 1990), but also through a single-minded engagement with sports and athleticism, such as high wheeling in the case of the men investigated in this chapter. They also joined the numerous fraternal organisations, lodges and clubs that swept the western world (Carnes, 1989; Clawson, 1989; Bullock, 1996). We can hardly wonder at the anti-feminist penchant of highwheel cyclists to form clubs in a world of domestic and evangelical Protestant propriety.

Masculinity, Technology and the Bicycle

It is tempting to draw a simple dichotomy between the age of masculinist highwheel bicycles (roughly 1870 1890), and the era of the safety bicycle in the 1890s when women took to bicycling in increasing numbers. The gendered use of the bicycle is not, however, quite that simple. As Bijker (1995), Oudshoorn and Pinch (2003) argue, the technological development of the bicycle was not determined simply by great inventors having eureka moments, but also by the people who were users or potential users of technology putting pressure on makers to develop technologies in particular ways. For example, in the case of the safety bicycle, bicycle manufacturers and women constructed women's involvement with the bicycle, 'because it [wa]s in the interest of the great commercial monopolies that this should be so', and because women believed 'humanity's mother-half would be wonderfully advanced by th[e] universal introduction of the bicycle' (Willard, 1997 [1895], 38 39). Further, as Norcliffe (2005) argues, technology is also geographically constructed, so the interaction between makers and users in particular settings (such as Coventry, England) was decisive in the development of cycling technology. The first true bicycle, the heavy boneshaker, with its wooden wheels, metal tyres and solid metal

⁴ Marsh (1990, 111–127: 112) suggests that certain middle-class men participated in a form of suburban domesticity, though domestic masculinity 'was not the equivalent to feminism... '[or] an equal sharing of all household duties' or even 'a belief that men and women ought to have identical opportunities in the larger society'. Rather, it was 'a model of behaviour in which fathers agreed to take on increased responsibility for some of the day-today tasks of bringing up children'.

frame, was ridden mostly by men, although a number of images from Paris suggest that at least a few sporting young women who (it would appear) did not subscribe to bourgeois values, rode and raced these machines in the Bois de Boulogne. This should be seen as a place-specific event: in titling his book *Paris: Capital of Modernity*, the geographer Harvey (2003) intimates that Paris originated modernity and its various cultural and technical expressions.

The 1870s saw the rapid evolution of the highwheel or ordinary bicycle, ridden almost exclusively by men, the exception being the circus where women performers were sometimes observed cycling. For the next 20 years men dominated cycling activity, mainly because women would have had to compromise Victorian bourgeois domestic ideology, its conservative dress codes and constructions of womanly public comportment, in order to ride a highwheeler. But again, technology did not make this distinction quite as clear cut as we might suppose. By the late 1870s the tricycle was recognised as a safe alternative to the bicycle, and a number of older men and women took to tricycling; Willard (1997 [1895], 14), in the 1880s, owned and rode a tricycle, a gift from her friend and bicycle maker 'Colonel Pope, of Boston, a manufacturer of these swift roadsters'. Tricycles competed with bicycles for space at the Stanley shows of the early 1880s when a little recognised tricycle boom was under way.⁵ It seems likely that the enthusiasm with which some women took to tricycling demonstrated to manufacturers the existence of a large potential market, and spurred the development of the safety bicycle. There was, moreover, yet another gendered variation on the bicycle, namely the tandem tricycle, ridden by a couple either side by side, or with the man behind the woman in conformity with Victorian niceties. Between one-quarter and one-third of all tricycles were tandems, indicating that the riding couple rapidly became an accepted part of the cycling scene after 1880. Such tricycles created both a class of users for the tandem bicycles of the 1890s, and established a precedent for the bourgeois domestic construction of the safety bicycle as promoter of domestic harmony, discussed below.

The safety bicycle caught on rapidly after 1888 as a conveyance for women, even though it was ponderous and unpleasant to ride. After 1892, and following the widespread adoption of reliable pneumatic tyres, women constituted roughly one-third of all North American cyclists. Thus, the years after 1890 saw women become an important influence on cycling, with technological developments making the machine progressively better adapted to women's use.

The Spaces and Places of the Male Cyclist

Men were the first riders of bicycles and it is perhaps fitting to pick up their story around 1878. Until roughly 1890, when many cycling clubs were being formed and the publication of the first cycling journals began to provide a written record of cycling activities, the male cyclist held sway in cycling circles. But *homo bicyclistus* formed two quite different sub-species, one given to orderly cycling in clubs and

⁵ The Stanley Show was an annual event organised by the Stanley Bicycle Club of London, England, held in January, where makers displayed their latest models. During the tricycle era it was the most important event in the cycling calendar.

groups which included formal bicycle racing, the other to *scorching* that is riding recklessly fast in an act of masculine spectacle very similar to a young man 'dragging' a sports car down a main street today.

Drawing on material in the original minute books of the Montreal Bicycle Club (MBC) for the period 1878 1890 and Morrow (1981), Norclif fe (2006) has depicted club life in Canada's first bicycle club as a form of modern citizenship, or perhaps more accurately, masculine citizenship. What emerges is an explicitly masculine understanding of sporting life and its proprieties, within a masculine discourse of capitalist competition (Carnes, 1990, 51; Rotundo, 1990). A key influence on cycling masculinity was Pratt (1845 98), described by Leonard (1978, 5) as the sport's 'foremost enthusiast and intellectual advocate' of that era. A patent lawyer based in Boston, Massachusetts, Pratt was introduced to cycling by Albert A. Pope, the first manufacturer of highwheel bicycles in the US. Pratt formed the Boston Bicycle Club in 1878 (the first in North America), founded the League of American Wheelmen in 1879, and perhaps most importantly, in 1880 published The American Bicycler: A Manual for the Observer, the Learner, and the Expert (here he laid out recommended practices for club members on club rides, prescriptions that seem to found much of the activity of the MBC, as we will show). This manual became the 'Bible' for club cyclists during the highwheel era. It contained the first set of road signals used by cyclists; it had a model constitution on which new clubs were to base their own; it set out bugle calls for club buglers; it recommended the style of club uniforms; and it described correct riding formations and protocols, insisting that the captain of a club 'should not only be able to preside with dignity and understanding, but also, if obtainable, be a man of such attainments or social standing or other eminence as to give prestige and influence to the club in the community' (Pratt 1880, 167). It is hardly speculation to link the masculinity of male bicycle club ideology to the Victorian *fraternity* impulse, whose purpose included teaching bourgeois men masculine social and moral felicity (Carnes, 1990; Hoffmann, 2001).

The model for Pratt's ideal bicycle club was drawn from Albert Pope's experiences as an officer in the Yankee cavalry in the American Civil War. On many occasions in his *Manual*, Pratt stresses that chivalrous behaviour was expected of club members at all times. The MBC's Constitution was quite explicit: 'Any officer may for repeated negligence or dereliction of his duties, be removed from office by a vote ...' (Article XI). Members were not to ride ahead of a club's captain or vice-captain without permission. Only a club's officers were permitted to carry whistles and give signals to members while on a ride. The club uniform, which was based closely on that of a cavalry officer, was to be worn on all formal club rides (Figure 8.1). Members were to act as gallants and adventurers, conscious of their rights and duties as bicyclists at all times, since they were the most conspicuous users of the road when out riding. Failure to demonstrate chivalry, especially towards women, could lead to a special club meeting where a member could be voted out of the club. Like medieval knights at a jousting tournament, club members who suffered injuries during rides were expected to endure them without complaint.

In 1878, the Bicycle Union of Great Britain set out rules for British cyclists in an attempt to codify the conduct expected of cyclists with a view to establishing their rights on public highways as equal to that of any other citizen. Charles Pratt took up



Figure 8.1 Mr Bishop, Standard Bearer of the Montreal Bicycle Club, 1885 (courtesy of Notman Photographic Archives, McCord Museum, 78594-BII)

the same cause in the United States, speaking strongly for the rights of the cyclist on the road, but tempering his claims by insisting that riders had an obligation to observe the courtesies of the road at all times. The development of such road rules needs to be understood in the context of road practices of the time. Most road users rode horses, or travelled in vehicles drawn by horses, and they had a hearty dislike for the newcomer male bicyclist. Many records describe horses being spooked by bicycles, teamsters pulling their wagons across the road to block bicyclists, and litigation in many jurisdictions between cyclists and other road users. MBC bicyclists, for example, strenuously defended their right to use of the roads in and around Montreal. Given the dangers of cycling on roads in these early years particularly of a *header*, when a cyclist is thrown forward highways were considered to be largely a man's place; women tricyclists, for instance, largely confined their activities to public parks. But in attempting to impose a code of behaviour on the road, the leaders of the bicycling movement had a constructivist agenda: to create a jurisprudence that recognised the equal right of all vehicle users on public roads. Cyclists were not in a position to demand special treatment, hence their appeal for egalitarian rules. In achieving this in the 1870s and 1880s, the men riding the highwheel bicycle paved the way for the women cyclists of the 1890s to embark on their project to domesticate public spaces, discussed below.

Club racers were expected to maintain a high level of fitness: letting the club down in competition with another club was not viewed favourably. For MBC members, two places of special significance and bodily improvement were the Blue Bonnets (horse) racing track where cyclists were allowed to train and race occasionally, and the practice track at the grounds of the Montreal Lacrosse Club where, during summer, racers trained two mornings a week before going to work. Here the masculinist side of early cycling was most in evidence: male athletes coaxed their unstable machines to speeds as high as 25 miles an hour. Crashes were quite frequent as racers caught each other's pedals and handle bars, or their rear wheels slid out on the bends. Their consequent wounds were badges of an aggressive masculinity that exemplified the era's resulting 'cult of muscularity', which identified firm muscles and 'manly' fitness as necessary attributes of bourgeois masculinity (Chauncey, 1994, 114).

Club members were also encouraged to be visible to the outside world. Thus, MBC reported its affairs regularly in Montreal's *Herald* and *Gazette*, and in other newspapers. Riding the highwheel bicycle solo was itself a very visible act, but to ride it in a uniform, as a club, loudly announcing one's progress with whistles and bugles, not only turned the heads of people on the street, it also brought the young and the old to gaze out of windows. Though it is hard to gauge such things, it would seem that men's bicycle clubs of the 1880s, despite their relatively small number of members, succeeded in their efforts to display the masculinity of a decidedly modern technology. In a demonstrably geographic and public way, these men gendered the street with their physical presence and reinforced the masculine athlete/gentleman stereotype. But as we will see in the section on anti-domestic cycling, reckless cyclists also made the streets places of irresponsible masculinity.

The responsibilities of cycling club members were organized hierarchically, and quite formally, in contrast to the much greater informality that was to suffuse mixed recreational cycling in the 1890s. The captain was to 'take command', as would any cavalry officer, assisted by his road officers the lieutenants, the bugler and the standard bearer. On longer rides, his whippers-in rounded up stragglers and urged them on. Longer rides through countryside or fields would often be in loose formation, but on approaching a town, the riders regrouped into a tight formation to

put on a good show. By 1880, the MBC had assigned every member to one of five lieutenants, in a very military fashion. Officers of the club had badges and whistles denoting their rank.

The masculine side of cycling in the age of the highwheel bicycle reflected a club's insistence on gentlemanly conduct. This was a class distinction: whereas today the line between professional and amateur sport is extremely fuzzy, in the late Victorian era the distinction was deeply significant, for an amateur was a *gentleman* and therefore deemed himself a superior citizen. Cycling citizenship was to be reserved for gentlemen; the Montreal Bicycle Club's constitution stated quite explicitly that ungentlemanly conduct would result in expulsion from the club. Fellowship was unambiguously class-based: the term 'gentleman' that so frequently appeared in club documents had clearly understood social connotations. Labourers and factory hands could not normally aspire to such status, nor could teamsters or shop assistants, or even professional sportsmen. Fellowship intentionally promoted social solidarity among the insider-citizens of an avowedly elite amateur club. The unique occupancy of the roads and parks of Montreal by club members on their rides confirmed status time and again. No other social activity asserted more vigorously men's rights of use of public highways.

Roughly half of all highwheel bicyclists in the 1880s appear to have belonged to cycling clubs, the remainder being 'unattached'. The latter were not all reckless riders. Many were enthusiasts who simply could not afford the extra costs of being a club member, including a tailor-made club uniform, sitting for a club photograph in a photographer's studio, smoking concerts, annual dinners and galas, *conversazione*, and other social activities of a club. But a sub-group of these unattached riders earned for themselves the unenviable title of *scorchers*. Fearless young male riders, they took substantial risks to demonstrate their prowess in speed-riding on the latest technical novelty they were perhaps early practitioners of 'badass' masculinity (Day, 2001; McDowell, 2002). No woman could engage not that men could either , as we will see in such activity without facing severe censure from the arbiters of Victorian decorum. Indeed, the level of censure rose as women began to assert their rights to the new spaces of the bicycle.

Domesticity, Cycling and Frances Willard's Wheel within a Wheel

The idea of identifying cycling as a domestic activity may strike some readers as oxymoronic. A strong thread of domesticity, however, runs through the women's cycling impulse of the 1890s, largely because many of the women involved in cycling had an ideological affiliation with bourgeois domesticity and its public aims (Mackintosh, 2005). The following, starting with a brief historiographical discussion, demonstrates the easy affinity between women, cycling and domesticity.

Early researchers of women, when reading the primary literature of Victorian domesticity demanding that bour geois women serve and protect the home from within mistook ideological prescription for geographical description (Kerber , 1988; Cott, 1990; Vickery, 1993). This mistake allowed researchers to overstate the idea of 'separate spheres', the belief that men and women lived mutually exclusive lives.

It also invigorated the misconception that Victorian women were not public, as we note above. They were, but old historiographic habits persist. The reprinted edition of Willard's (1997 [1895]) bestseller, *Wheel within a Wheel: How I Learned to Ride the Bicycle, with Some Reflections by the Way* sports a new subtitle: *A Woman's Quest for Freedom*, as if to suggest that Willard and late Victorian women like her cycled to escape domestic incarceration. Nothing could be further from the truth for many of the elite women who first mounted safety bicycles in the 1890s. Privileged, educated women, these cyclists engaged in public work and/or believed in the public efficacy of the 'New Woman', who rejected the conservative domestic prescriptions of her mother and grandmother (Mackintosh and Norcliffe, 2006).

This is not to qualify the domestic influence on women's public use of the bicycle; the idea of a 'domestic public' hinges to women's employment of domestic ideology and specifically *embourgeoisment*, the desire to make the moral and geographical world bourgeois (Mackintosh, 2005). Fin de siècle domestic ideology manifested two important attributes that affected women's cycling impulse: bourgeois class-status and moral propriety, though both informed each other. The first demanded attention to bourgeois faith in conspicuous consumption, the use of one's disposable income to demonstrate materially and affirm symbolically one's membership in bourgeois society; put simply, 'the failure to consume in due quantity and quality bec [ame] a mark of inferiority and demerit' (Veblen, 1953 [1899], 64). This desire and ability to exhibit class-status in public in the 1890s necessarily included the *de rigueur* bicycle, a prohibitively expensive and exclusive technology (Smith, 1972; Norcliffe, 2001, 31), one heartily embraced by the western urban gentry (Mackintosh and Norcliffe, 2006).

Conspicuous consumption also became a moral imperative for a class of people committed to distinguishing and segregating itself from a poor and underprivileged 'Other'. As Domosh (2001) shows, bourgeois distinction suggested that the bourgeois *must, ought to, should* comport itself fashionably. We may safely infer that anti-domestic behaviour at the end of the nineteenth century equated with anti-bourgeois, anti-social and immoral behaviour (Domosh, 2001; Howell, 2001; Mitchell, 2002; Mackintosh, 2005); remember this anti-bourgeois/anti-domestic pairing for what follows. Thus, moral domestic compunction lay at the foundation of bourgeois consumption. The bourgeois participated in consumerist activities, in part, because they had to, but also because bourgeois domesticity had become equated with the decorative generally and the decorative arts particularly, which were largely consumerized in the fin de siècle (Reed, 1996). Bourgeois domestic taste was purchased and displayed; the expensive and elegant bicycle was a prime example.

The bicycle was also one method in an arsenal of reform-methods employed by bourgeois women as domesticators and agents of domestic *embourgeoisment*, the use of conspicuous consumption to effect the domestication of public space. Fortunately, for our purposes here, Frances Willard's *Wheel Within a Wheel* (1895) reads like an instruction manual for women committed to bourgeois domestication. A selective reading of Willard's little book as well as parts of Maria Ward's *Bicycling for Ladies* (1896) will help the reader grasp the domestic publicity, or publicness, of cycling, as represented by the president of the Women's Christian Temperance Union (WCTU), the most powerful domestic women's organization in the Victorian age.

Before we get to Willard, however, and to contextualise the domestication proclivity of bourgeois cyclists, the reader needs to understand what anti-domestic cycling was cycling performed without consideration for domestic propriety and why it irked domesticators. For this, we use Toronto, Canada, the leading 'English' city in the British Dominion, according to boosters (Mackintosh, 2001, 431-2). Toronto's politicians and engineers embraced the bicycle as a profound expression of modernity. The bicycle in Toronto, it was hoped, enabled the cosmopolitanism-hungry city to display fashionable modern people on modernised, asphalt-paved streets (Mackintosh, 2005b, 30).

The Anti-Domestic Safety Bicycle in Toronto

The bicycle up to the 1890s had been construed as a kind of modernist, technological radicalism, and had a history of provoking disapproval in everyone from editors to evangelists (Woodforde, 1970; Alderson, 1972; Harmond, 1972; Smith, 1972; Humber, 1986; Marks, 1990; Bjiker, 1995; Norcliffe, 2001). Scorchers who raced about town without concern for the sanctity of the pedestrian or civic propriety convinced the bicycle's detractors that cycling should be categorised with all things disorderly and indecorous. Importantly, the riders of these early bicycles, as we have seen, were predominantly men.

Ironically, the introduction of the safety bicycle in the 1890s did not universally compel safe riding and/or eliminate bicycle-recklessness. The safety bike did, however, allow Toronto and many western cities to experience first hand what one contemporary writer called a "cult of speed" for a generation that wanted "to conquer time and space" (Paul Adam, in Kern 1984, 111). The *Mail and Empire*, Toronto's leading elite newspaper, complained of 'hoodlums [racing] up and down the asphalt streets in order to test their speed' (*Mail and Empire*, 3 April 1895, 2). '[T]his class of persons' (ibid.), young male riders in fact, forced all manner of harm, apparently, on the citizens of the city. Later in 1895, the *Mail and Empire* (3 May 1895, 6) again fulminated against these riders, since an unprecedented number of collisions involved:

reckless cyclists, who either do not know how to manage their wheels properly or are indifferent to the injury they may inflict upon unsuspecting pedestrians. The police ought to receive strict instructions to arrest riders who move at dangerous speeds on the crowded thoroughfares. A few severe examples would prove salutary, and citizens could take to the crossings [without] the danger to which they are now exposed.

Reckless, dangerous riders seemingly attracted universal scorn. The cause of this recklessness was usually scorching. A form of 'bicycle intoxication', scorching was the speedy compression of time and space and riders soon craved it. Even the ageing Willard (1895, 50) occasionally capitulated to the elation generated by 'swift motion round a bend'. However, as Maria Ward (1896, 79) noted in *Bicycling for Ladies*, scorching bred carelessness: 'The scorcher sees little, hears little, and is conscious of

little but the exhilaration of the moment ... Scorching is a form of bicycling hardly to be commended, and reckless scorching is to be condemned at all times'. Proper cycling behaviour excluded fast riding, which was also un-ladylike, according to Ward.

According to the *Mail and Empire*, scorching was a leading cause of collisions; adults and children were not safe from brutal riders who knocked them down, broke their bones, and sped away (see for example, *Mail and Empire*, 9 May 1895, 10; 10 May 1895, 6; 26 January 1898, 6). One woman, seriously injured by a scorcher, urged Toronto City Council to back Alderman Stratton's 'Bill', which would curtail the liberties that Toronto cyclists enjoyed, specifically in '[m]atters of speed, of overfast riding [and] of using the streets as racing tracks' (*Mail and Empire* 30 March 1895, 7; 26 March 1895, 4). Toronto Mayor, William Howland, noted in council that scorching cyclists ran down lawyers daily: 'a bicycle cannot go astray in Toronto without meeting a lawyer', although he also glibly added that lawyers getting run down was not necessarily a bad thing why regulate that? (*Mail and Empire*, 3 April 1895, 2.) The frequency of speeders hitting pedestrians galled *Saturday Night* editor, Edmund Sheppard:

[s]peaking from the sidewalk and for the benefit of all scorchers, I am impelled to say that when a wheelman flies along and everyone pauses to look at him and after him, they do it not in admiration of his speed or his knee-action, as he fondly imagines, but they look to see if something won't kindly kill him. (*Saturday Night*, April 25, 1896, 1)

Fast-moving bicycles wheeled up and down Toronto's streets, threatening pedestrians still learning to judge the speed, often unsuccessfully, of the even slower moving streetcars (Walden, 1997, 5 6).

The bicycle was becoming a technology destined to contribute irresponsibly to the melee of the modern city. Indeed, as one *Mail and Empire* editor moaned in an editorial on Toronto's lack of 'Safety in the Streets':

The number of street cars in motion about the corner of Yonge and King streets, for example, are enough for most people to look after; and when to these are added the numerous carts and carriages, many of them driven by unskillful and reckless persons, crossing the street is very much like running the gauntlet. What then shall be said of the chances of escape when one finds sandwiched in between these the numerous and ever-increasing host of bicycles? (*Mail and Empire*, May 16th 1898, 4)

The streets proffered a danger that only worsened with the presence of fast-ridden bicycles, which contributed to a rhetorical condition unique to both pedestrian and cyclist in the 1890s: 'Suicide by Bicycle' (*Mail and Empire*, 11 December 1897, 4). Thus, these few examples of reckless cycling in the smaller metropolis of Toronto in the 1890s suggest that both anti-domestic bicycle and cyclist were further impediments to decorum and civility in the modern industrial city.

Frances Willard and Domestic Cycling

Willard's challenge, as a proponent of cycling and the leading promulgator of late-Victorian domesticity in Europe and North America (Bordin, 1986), was to persuade bourgeois domestic women that the bicycle did not have to be an unruly and masculine mayhem-maker in the city's streets. It could also be a feminised tool of domestication. Indeed, a domesticated bicycle enabled cycling for women without compromising their domestic inclination.

If any message leaps from the pages of A Wheel within a Wheel (hereafter Wheel) it is that cycling is a genteel, womanly, domestic activity, with health benefits. The womanliness of cycling was crucial to Willard, whose own personal motto was, 'Womanliness first afterwards what you will' (Bordin 1986, 9). Domestic embourgeoisment and womanliness undergird Willard's main argument, assuming we can ascribe such a term to the rambling, personal and belief-laden narrative of Wheel: the bicycle was at once a domestic, public and womanly technology. Accordingly, Willard prescribes and describes the geographies to which women most naturally belong as cyclists, and includes the kinds of behaviour in which a woman on a bicycle should engage. The bicycle and the bourgeois experience lay at the heart of Willard's admiration for cycling; she called it the 'poetry of motion', especially when that motion occurred in 'landscapes breathing nature's inexhaustible charm and skyscapes lifting the heart from what it is to what shall be hereafter' (Willard, 1895, 40). Domestic cycling, for Willard, was a moral, aesthetic and spiritual experience, in the era of evangelical Protestant progressivism (Carter, 1971; Loughlin, 1978; Marsden, 1990).

The photographs throughout *Wheel* show Willard in the various stages of learning to ride (Figure 8.2). All have a rural or garden setting, ivy and country lanes quite prominent. Willard juxtaposed the bicycle's extant progressivism with domesticated and reformed cycling 'amid the delightful surroundings of the great outdoors, and inspired by the bird-songs, the color and fragrance of an English posy-garden, in the company of devoted comrades and pleasant companions' (Willard, 1895, 75).

The bourgeois domestic cycling experience resonates in Willard's description of stately Eastnor Castle, in England, on whose comely terrace Willard and companion

first pedalled solo (W illard, 1895, 28-29). An etching of the castle accompanies Willard's thoroughly aestheticised depiction of the occasion:

[T]he sky was a moist blue that only England knows, and the earth almost steamy in the mild sunshine, while the soft outline of the famous Malvern Hills was restful as the little lake just at our feet, where swans were sailing or anchoring according to their fancy (Willard, 1895, 30)

Willard here seems to use the terrace of Eastnor Castle as a metaphor for the modern urban park she had frequented parks as a tricyclist which gained prominence in the late Victorian era for its capacity to provide moral tuition for its visitors (Rosenzweig and Blackmar, 1992, 29–30). The park, especially as it 'resemble[d] a charming bit of rural landscape' (Olmsted, in Rosenzweig and Blackmar, 1992, 240), could provide the kind of domesticated beautiful and beautified landscape that Willard deemed so necessary for proper cycling. Eastnor's park-like terrace was



Figure 8.2 Frances Willard mastering her bicycle, 'Gladys', in a photo taken from her 1895 bestseller, A Wheel within a Wheel: How I Learned to Ride the Bicycle

a far cry, aesthetically and geographically, from the anti-domestic streets of modern cities.

As for right behaviour on the bicycle, Willard described it. As she and her companion cycled about Eastnor Castle, she wrote, it was just before Christmas and the two conversed about Willard's new year's resolution for 1894: 'to develop that

cheerful [mental] atmosphere which helps to smooth the rough edge of life'; this was followed by a brief philosophical discussion about the good, the truth, criticism, and life-after-death (Willard, 1895, 29–32). Another ride was salted with what Willard

thought to be good talk of things in heaven and earth and waters under the earth; of the mystery that lies so closely round the cradle of this world and all the varied and ingenious ways of which the bicycle, so slow to give up its secret to a care-worn and inelastic pupil half a century old, was just then our whimsical and favorite symbol (Willard 1895, 37–38)

Why would Willard write of such things in a book about learning to ride the bicycle? The answer, we contend, is that such conversations are precisely the point of *Wheel*. The domestic cycling experience, for Willard, must encompass the physical, the aesthetic, the moral, the spiritual and the intellectual (she was, after all, a former professor of aesthetics and Dean of Northwestern University). We know that bourgeois femininity was in part built on everything that helped forge the bonds of womanhood, which described the closeness that bourgeois women, mothers and daughters enjoyed a generation before as they worked and conversed together, learning about and practising moral probity (Ryan, 1981). Given this, Willard's interpretation of cycling not only encompassed womanliness, but intimated something indicatively domestic: the bicycle as parlour, the prescribed site for and geography of moral tuition in the bourgeois Victorian woman's home (Sklar, 1976; Wright, 1983; Dannell, 1986).

Lastly, as a promoter of domesticity, cycling also tempered conjugal bonds (Figure 8.3), an important social point in the modern city, where families and children were felt to be literally falling to pieces (Sennett, 1970). If the home, the focus of Willard's WCTU efforts, was to improve, the bicycle could play a significant

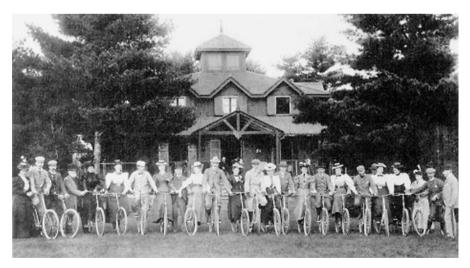


Figure 8.3 Ottawa, Ontario: 'Society' couples meet outside Mr Mial's cottage in Aylmer, 1895 (courtesy of the National Archives of Canada, C39096)

part in its progression. How? Apart from believing that cycling helped men eschew drunkenness, a chief instigator of domestic dysfunction in the nineteenth century (Bordin, 1981), Willard 'h[e]ld that the more interests women and men can have in common, in thought, word and deed, the happier will it be for the home' (Willard, 1895, 73). The bicycle, in this cause, 'forwarded good fellowship and mutual understanding between women and men who take the road together' (Willard, 1895, 40). Because, as we have seen, men until the 1890s had been the riders of bicycles, Willard hoped that her enthusiasm for the bicycle would have 'special value' to her 'comrades in the white ribbon army', the bourgeois domestic women of the WCTU. By linking the bicycle intimately with the home and its doings, Willard branded the bicycle 'domestic', and bid her followers to 'Go thou and do likewise!' (Willard, 1895, 75).

The Geography of Domestic Cycling

A domesticated bicycle was a softened and tamed version of its anti-domestic alternative. Ward (1896, ix) agreed: her concern over cycling was not *that* people, especially women and girls, rode bicycles but 'the way they d[id] it'. This would suggest that some women, no doubt including women racing cyclists (see Simpson, this volume), were not riding according to the domestic manner of cycling, which was paramount, as we have shown. These women rode individually, contravened the rigorous cycling dress code (Ward, 1896, 93-99), and were generally 'doing more harm to the cyclists' cause ... than can be imagined' (The Ladies' Journal, May 1895, XV, 5, 7). Domestic cycling, however, was fashionable, organised, family-orientated and communal cycling activity that demonstrated 'educated, good taste [that] ha[d] a reasonable chance to exert its influence' (The Ladies' Journal, August 1895, XV, 8, 8). This perhaps explains why in the 1890s we find the *bicycle gymkhana*, an outdoor cycling tournament for men, women and children. It may further account for the presence of families on bicycles in parks, and couples and groups of cyclists in elite settings such as outdoor ice cream parlours, as we will see below. With an emphasis on artful comportment, civility and proper bicycle use, these cycling instances typified Willard's and other's construction of domestic cycling.

Domestic bicycle boosters cared deeply about cycling behaviour in public spaces. Courtesy, orderliness and a general adherence to personal moral exactitude should govern bicycle use bour geois highwheelers, as we have seen, marshalled the same principles in their earlier bicycle clubs in order to differentiate the domestic rider from the 'reckless and ignorant people who disregard [these riding principles]' (Ward, 1896, 46); Ward's (1896, 49–50) recommendations for polite cycling included '[n]ever rid[ing] more than two abreast', [r]iding in single file, riding at proper distances from one another, 'travelling at a moderate rate of speed', properly dismounting, and riding on 'well constructed highways, with telephone and telegraph, post office and express office ... easily accessible'. We might well ask why Ward and others cared to moralise, without explanation, about cycling conduct in public.

Partly, cycling moralisations relate to Victorian conceptions of public space, which had as much to do with the mannerliness of the many classes of occupants of the streets, and the prescription and management of principles of comportment, as it did with streets and built spaces themselves. Geographers have documented the increasing and efficacious bourgeois claim on public spaces in the nineteenth century, keenly noting the connection between middle-class values and spatial and social control (Domosh, 1998, 2001; Howell, 2001; Mitchell, 2002; Goheen, 2003; Mackintosh, 2005). Domestic cycling was simply another manifestation of this bourgeois geographic normativity, which included the manipulation of social behaviour through the use of artful design and beautified environments (Mackintosh, 2005a). This perhaps suggests why Ward like Willard was keen to manufacture the idea of beautiful rider and beautiful bicycle: the cyclist 'should' be dressed in 'carefully selected' cycling attire so as to 'look well at all times' when bicycling; the bicycle 'should' be so well-preserved for appropriate use that it must even 'be kept free from finger marks' through the use of an always-handy 'chamois and a clean piece of cheese cloth' (Ward 1896, 54, 93, 99). In an era that invested public space and its inhabitants with impossible ideals, the domestic bicycle and its geographies helped the cause.

In this context, the bicycle gymkhana, favouring cycling decorum and propriety over athleticism (though many of the events of the gymkhana required significant bicycle-handling skill), may have been a cycling event but it was also a bourgeois public spectacle. The gymkhana was a grand intimation of the proper use of bicycles and public space. It is therefore possible to think of the bicycle gymkhana as an expression of geographical comportment that meets the dictates of bourgeois domestic public expectation and probity.

The gymkhana, usually associated with horse-riding, is a competition or display of sport. 'Display' is the keyword here, since domestic cycling demonstrated one's affiliation with the bourgeois construction of proper appearance. Small wonder, then, that a bicycle gymkhana in Toronto in 1898 was described not as an athletic event but a gathering 'of decorated wheels [where] original ideas [we] re at a premium' (*Mail and Empire*, 28 July 1898, 6). If this particular gymkhana resembled the bicycle gymkhana held annually in Niagara, Ontario, then pageantry and show were the aim of these decorative cycling events.

The Times of Niagara (changed to Niagara-on-the-Lake after 1901) reported a 'Bicycle Tourney' that took place on the 'green of the Queen's Royal Hotel' in 1896, noting the event was 'successful in every particular' (Bicycle Tourney, 1896).⁶ The 'chief event' of the gymkhana, readers were told, on the first of a two day affair, was the 'floral parade, which was admired by all who were fortunate to see it'. Why fortunate? *The Times* explained that 'the effect produced by the 66 wheels beautifully decorated with riders in costume is one more easily imagined than described'. Still, the sight of the cycling parade was 'exceptionally artistic and pleasing'. We need not stretch to infer that the artfully decorated wheels of the floral parade represented for *The Times* an appropriate use of public space.

⁶ All subsequent references to the bicycle gymkhana in Niagara, Ontario, come from this paper which did not use page numbers.

The parade included the Honorary Secretary of the gymkhana, one E. Scott Griffin, whose bike 'was decorated with red carnations and geraniums, interspersed with similax'. Another parade entrant, the Niagara Fire Brigade, comprised a total of 22 men on wheels, and looked more than presentable 'in red shirts, white caps, carrying Japanese parasols ... their wheels decorated with red flags'. A brigade of firefighters carrying parasols on flag-decked bicycles undoubtedly offered a contrast with the numerous male scorchers who rode their bikes with abandon in the modern city streets. 'A Stearns tandem' ridden by two Torontonians, Arthur Van Koughnet and Sybil Seymour who later won the prize for best decorated tandem prof fered spectators 'a canopy of white dahlias and asters, with asparagus fern interspersed'. In an era that construed horticulture and landscape design as art, little wonder that *The* Times could write that 'the pleasure' of the event was even more 'enhanced by the presence of D'Alesandro's Orchestra'. At the bicycle gymkhana, flowers, music and art, the arguable keys of domestic *embourgeoisment*, were employed to domesticate what Willard (1895, 75) called 'the most remarkable, ingenious and inspiring motor ever yet devised upon the planet'.

The gymkhana, however, was not only about decorous and decorated cycling. There were also bicycle games. Such games demonstrated that the bicycle could be used athletically without overstepping the bounds of propriety.

The Times described the various competitions that took place on the second day of the gymkhana. There were at least nine events. The 'Kindergarden race for girls' required youngsters to ride through two uprights placed 22 inches apart. A 'Juvenile race' was based on the same premise. The 'Maiden's Scurry' asked young women to race, stop and lift their bikes over an obstacle and then continue. A formal 'Obstacle Race' was more demanding: racers rode 10 yards, dismounted, lifted their bikes over an obstacle, rode another 30 yards where the rider, without dismounting, picked up a handkerchief, continued another 20 yards and passed between two narrow uprights to the finish. Another difficult event, the 'Tortoise Race', awarded a prize to the last cyclist to cross the finish line, providing that the 'loser' had neither stopped nor fallen on the way. The 'Needle and Necktie' asked men to thread a needle on their bikes and women to tie a necktie. The 'Parasol Race', inter alia, involved picking up a parasol without dismounting, opening it, and crossing the finish line with the umbrella shading the rider. Riders lanced a tent peg on the fly in the 'Tent Peg'. And lastly, those in the 'Tankard Race' snatched a pewter tankard from a table of filled tankards as they passed and drank its contents without spilling (we may safely surmise that these 'contents' were non-alcoholic, for at least one reason cited below). Figure 8.4 shows the winners of a later bicycle gymkhana, circa 1901, posing with their decorated bicycles.

If the gymkhana offered one form of domestic cycling, the *Mail and Empire* society page, 'On Dit', showed another when it fussed over an upscale ice cream garden for cyclists on Toronto's Jarvis Street. Again, we may infer the subtext of this article as the advancement of both decorous cycling behaviour and bourgeois civility in public spaces; it was after all expedient 'to look well at all times when bicycling' so as not to appear 'incongruous' (Ward, 1895, 99).

The streets of *fin de siècle* Toronto were, like many northern North American modern industrial cities, rife with heavy traffic, gangs of unemployed men and leisure



Figure 8.4 Winners at the bicycle gymkhana in Niagara, Ontario, circa 1901 (courtesy of the Niagara Historical Society & Museum, 985.4.488)

seeking 'working girls', swarms of child labourers, ragged boys and vagrants, poorly paved street surfaces and sidewalks, and squalid housing (Mackintosh, 2005a, 693-694). We need not speculate why the *Mail and Empire* happily asked its readers: '[W]hat could be more delightful than a gentle wheel through the cool evening air with the objective point a pretty garden, lantern-lighted, with dainty maidens to serve ice cream and good refreshments?' (Mail and Empire, 27 July 1898, 6.) We learn that among that evening's patrons visiting the garden were cycling parties from Parkdale and Rosedale, at the time two of Toronto's elite suburbs. 'Many a jolly group enjoyed the good refreshments, ice cream, or ginger ale' on the shaded lawn among trees and Chinese lanterns (Mail and Empire, 28 July 1898, 6). Here we have the bourgeois domestic geographical antithesis to the anti-domestic technological nightmare vehicular traffic made of city streets: a thoroughly domestic and temperate Willard wrote that she 'found high moral uses in the bicycle' cycling experience and one of them was as a palliative for intemperance, or drunkenness (Willard 1895, 28). Most important, however, is the implication that on a domesticated bicycle one may not only experience the aesthetic in the streets of the chaotic modern city, but change the nature of unruly public space through domesticated behaviour.

It was no conceit of Willard's that domesticated cycling could buttress conjugal and family relations: it was her view that cycling could 'make pleasant that which is otherwise irksome' (Willard, 1895, 55); Ward (1896, 5) similarly believed that 'cheerfulness is an invariable factor' of cycling. Because pleasantry contributed to the social acceptance of cyclists, *Saturday Night's* editors' urging of Toronto's Sabbatarian and anti-cycling clergy, to acknowledge the eminently domestic respectability of cycling, had the ring of Victorian common sense:

[P]astors who have spent Sundays in one way for years would be startled by a view of the Sunday life that has developed in this city, all unknown to them ... their first surprise will be occasioned by the number of people who, having wheels, rush from the city to the Park. There they will be surprised to see fathers, mothers and children riding in family groups and to the unmistakable respectability of most of those who form the crowd. But their greatest surprise will come when they begin to recognize prominent members of their own churches. (*Saturday Night*, July 4, 1896, 1-2)

And if observers witnessed families on bikes, it was also becoming commonplace for them to see married couples relaxing a-wheel on the streets of the city:

In New York city there is no distinction of persons on the wheel, and for a woman to ride there attracts no more attention than for a man to ride a horse anywhere. There are no symptoms of a 'fad' about the use of the wheel; the riders have discovered that it is a very healthy and fascinating exercise and they ride because they enjoy it. Many a husband and wife take the wheel when they go out to make an evening call (The Flaneur, 1895).

Here the *Mail and Empire* echoes Willard's own feelings: 'I always felt a strong attraction toward the bicycle because it is a vehicle of so much harmless pleasure' (Willard 1895, 13), especially as it promoted domesticity, a good deal of which was harmony between the sexes. And what could be more aesthetically pleasing to a domestic ideologue than the sight of a handsome married couple riding in the summer city twilight? Married couples and families on bikes tangibly manifested bourgeois domestic values while reinforcing domestic decorum in public spaces.

Conclusion

Norcliffe (2001, 187), using Ritchie (1996), explores the idea that 'cycling had a bigger influence on social modernity through its class relations than through its gender relations'. Our discussion in this chapter demonstrates that class and gender intimately bind with the late Victorian cycling impulse. Women and men attending and rejecting the constructions of gender advanced by bourgeois Victorian society, and its prescriptions of domestic probity, participated in different yet overlapping forms of gendered cycling. Many bourgeois men, reacting to the influence of domesticity in their upbringing, and emulating the mores and discipline of the cavalry, developed a decidedly masculine cycling ethos, one that mimicked the gentlemanly fraternalism of the era. These men formed bicycle clubs governed by their own interpretations of masculine morality; masculine cycling obliged chivalrous masculine behaviour. Other men, beguiled by the speed of bicycles, scorched through cities in an openly anti-domestic manner. Women, on the other hand, used the bicycle as a form of domestic *embourgeoisment*; the bicycle had appropriate uses some women apparently ignored them and hence the need for Ward to forward her feminised version of cycling that could assist women in their desire to bring order, beauty and responsibility to the unruly streets of the modern city. For women such as Frances Willard and her followers, the bicycle was not only a domesticator, it *was* domestic, a parlour on wheels. It had its own code of conduct, manner of dress and decoration.

172

When these standards were flouted by men or women, cycling could be construed as anti-domestic, and importantly, anti-bourgeois.

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Chapter 9

Bicycle Messengers: Image, Identity and Community

Ben Fincham

After teasing the reader, sadistically, expertly and for several pages with the near-certainty that the story will end with a loveable single mother being knocked off her bicycle in an accident that will kill both her and her tiny son, Sayle's narrator abruptly announces the real victim of the collision: 'a bicycle messenger called Darren Barley who was a complete waste of fucking space and deserved to die' (Coe, 2003, 27).

Introduction

This chapter examines representations of a group of cyclists with a strong sense of identity which often manifests itself in feelings of marginality in a variety of social settings bicycle messengers. Bicycle messengers consider themselves, and are considered to be, outside the 'mainstream'. As is illustrated in the above quote, bicycle messengers are often derided as irresponsible, dangerous, even a 'waste of fucking space'. This chapter describes the work of cycle messengers, and gives a brief explanation of the study from which the chapter is derived, before looking at media representations of bicycle messengers and examining how such representations are used within messengering to maintain an 'outside' identity. It suggests that issues of 'outside' status are important for explaining the marginalisation of messengers in particular and cycling more generally.¹

Brief Background

The bicycle has been used as a device for delivering communications since its invention. Perhaps most notably it was used in mail delivery services throughout the late nineteenth and twentieth centuries. In the 1890s the Western Union Telegraph Company in the United States regularly employed cyclists, and in Europe throughout the early years of the twentieth century 'Les Triporteurs', tricycle messengers, were to be seen throughout France. Postal delivery services using bicycles also developed in the UK and Italy (IFBMA, 2004). However, the bicycle was not absolutely central

¹ The chapter is based on a study of bicycle messengers in the UK and Europe conducted between 2001 and 2004. It comprised an eighteen month period of ethnography, when I worked as a cycle messenger, 40 interviews with messengers in Wales and England, and a questionnaire survey of 154 messengers in the UK and Europe.

to this work sector until the end of the Second World War when, in 1945, Carl Sparks founded the first 'all bicycle delivery service' in San Francisco. From there cycle messenger firms began to spread to large cities across the USA. It was during the 1960s that the association of bicycle messengering with flexible labour and what might be called 'counter culture' was made, and it became associated with 'the starving artists' way of employment' (Shaping San Francisco, 2004). This reputation has survived as the 'no contract', 'no credentials' nature of the job continues to attract a young and transient workforce. It was not until the 1980s that bicycle messengers began to appear on the streets of the UK and Ireland, with London establishing itself as the hub of Britain's courier community. Currently, there are firms operating all over the UK and Ireland, each with its own localised scale and identity.

The large majority of bicycle messengers in the UK today are men. My survey suggests that women comprise about one in six of the workforce. Perhaps because cycle messengering is a physically demanding job, the age profile of messengers is relatively young compared to other employment sectors, with the majority of riders between the ages of 25 and 31 years old. People tend to work as messengers for approximately three to four years; however, a quarter of messengers in the UK work for over six years. One of the more striking features of UK bicycle messengers is their educational profile, with well over one-third of the messengers surveyed possessing a degree. In an article on messengers in *Cycling Plus*, Cass Gilbert sums up the London workforce as 'post-grads, art students, professionals and immigrants, as well as a whole host of European neighbours keen to spend a season or two in London' (Gilbert 2003: 61). This mix of people tends to be replicated, albeit on a smaller scale, in cities around the UK.

The Work of a Cycle Messenger

The work of a bicycle messenger is, on the face of it, relatively simple. The job involves picking up packages, parcels or letters from one place and delivering them to another. Bicycles are used as they are often the quickest way of navigating traffic congested city centres. The locations of individual deliveries, or 'drops' as they are known, are communicated to riders via two way radio, pager or, increasingly, mobile telephone. Most bicycle messenger firms have a central control location, normally an office, where a 'controller' takes orders over the telephone from businesses or individuals who need something delivered. The controller will then distribute the jobs to messengers on the road over the radio, pager or mobile phone.

The larger the number of messengers working for a firm the more organised the controller needs to be. The location of each rider has to be known by the controller in order to distribute jobs sensibly. For example, if a rider is in the east of a city and a delivery comes in 'picking up' in the east and 'dropping' in the north, the controller needs to know that the rider will be able to 'cover' this job and then be able to receive a consecutive job picking up in the north and taking it elsewhere. This process will be happening for several riders at the same time. The skill of the controller is in making sure the whole city can be covered at all times and that all riders are busy

at all times. Generally, this means that riders are kept apart, as there is no point in having two riders covering the same area.

Messengering can therefore be quite a lonely job, with colleagues perhaps meeting only a couple of times each day. After a while messengers become very familiar with the city, creating mental maps of the quickest routes for cycling. Most messengers are paid on a commission-based, per-job basis. Because of this, messengers make most money if they are carrying a number of packages at once and dropping them off en route to other pick-ups. This is known as a 'run'. In short, then, the job of cycle couriers is essentially riding to and from city centre or suburban offices, picking up and dropping off packages.

Most of the interviews, and the ethnography, from which this chapter derives were conducted in two cities Cardif f (Wales) and London (England). These two cities vary greatly in size and density of business activity; as a result the cycling is very different in each. Despite the differences between the two cities, I found that the communities of cycle messengers in each shared many common features. A strong theme that emerged throughout the research was the feeling of exclusivity of the bicycle messenger communities in both Cardiff and London.

Bicycle messengers are marginal in several respects. In terms of the labour market, cycle messengers are at the periphery. Theirs is a low paid, dangerous, physically demanding occupation where practically all are employed on an individual sub-contracted basis. Many couriers engage in activities that might be considered 'deviant'. There is a fair amount of recreational drug use and a level of self organisation reminiscent of Howard Becker's jazz musicians (Becker, 1963), where the 'outsiders' are those who do not belong to this exclusive community, and the community itself is made up of people outside of the normative value systems of 'conventional' society. The messenger community is organised around the bicycle as the principal feature of messengers' social lives and livelihoods.

Media portrayals of messengers as particular types of people, and messengering as a particular type of work, have helped to fix messengering as a marginal activity. Whilst this marginal image is positively exploited by messengers to consolidate a 'sub-culture' or 'lifestyle', it has a negative impact on opinions of cycling more widely contributing to an image of cycling as a dangerous activity indulged in by irresponsible people.

Image – From the Outside In and from the Inside Out

Media representations of bicycle messengers contain four basic standpoints that inform popular perceptions. The first is the 'positive-outside' representation, where the correspondent, who is not a messenger, uses myth building techniques and positive stereotyping, incorporating themes of sympathy or admiration, to create a favourable if romanticised image of messengers. The second is the 'negative-outside' representation where the correspondent, who is not a messenger, uses similar methods of myth building and hostile storytelling to enforce negative stereotypes. Third is the 'positive-inside' representation where the correspondent, who is a messenger, portrays an image of a coherent sub-culture, incorporating themes of celebration, dedication and bravery. Finally there is the 'negative-inside' representation where the correspondent, who is a messenger, presents an image of a workforce which is exploited, vilified, marginalised and victimised.

These standpoints are important because of their role in informing the wider population about a group of people that most of us have not engaged with on anything beyond a cursory level. By examining the content of each of these standpoints, clear sets of generalisations and stereotypical characteristics emerge as competing for dominance in the public domain, as best fitting bicycle messengers. This analysis of different representations of bicycle messengers also has clear relevance to wider practices of cycling, something which will be considered at the end of the chapter.

'Positive-Outside'

Since the mid-1980s, journalists and commentators have been interested in bicycle messengers as a curious urban phenomenon, difficult to understand but relatively easy to document. There are many examples of writing that conveys a sense of advocacy for a misunderstood group of people. Much of this writing is suffused with a sense of admiration verging on awe. In *The Guardian* in 1986 the journalist W.J. Weatherby wrote about New York's bicycle messengers:

They rush through openings and between motor cars often only inches away from disaster and they have the cheerful devil-may-care attitude of people who live constantly with danger To understand their dedication you have to see them blowing their whistles as they perform incredible cycling feats in reaching some inaccessible place in record time. Their faces invariably reflect a sense of high adventure, one of the oldest adventures known to human beings: that of the messenger delivering his message against all the odds (Weatherby 1986).

This style of writing, describing a largely misunderstood, physically fit workforce with an unconventional worldview, persisted throughout the 1990s. Writing in *The Independent* in 1994, another journalist, Jonathon Sale, evokes an enduring image of the free spirit of messengers by using a wildly romantic metaphor:

Commuting cyclists dress down: old trousers and a yellow reflective stripe over the shoulder. Couriers by contrast dress up as if they were going surfing. As indeed they are, surfing the waves of traffic, diving past vans, taxis and other sharks in the swirling metropolitan waters (Sale, 1994, 16)

In 1996, *The Independent* ran a story entitled 'Road warriors; adrenaline junkies, risk-takers, Mad Max outlaws the only normal thing about a bicycle messenger is his job'. The article portrays a group of riders as primal creatures, adapted to survive in a hostile urban environment (Hind 1996, 28).

A romantic presentation in the print media continues to this day. There is a fascination with a community conveying a strong sense of 'otherness'. *The Irish Times* ran an article covering the phenomenon of illicit 'Alley Cat' races. These races are organised by messengers themselves, are designed to replicate the conditions of messengering and are usually held at night. They are seen by many messengers as

an integral expression of 'courier culture'. The article presents a view of a coherent culture which is closed to those not involved in couriering, and where couriers routinely flout the law and flirt with death (Murphy 2002, 75).

Within this 'positive-outside' discourse there is the construction of an identity for public consumption which accentuates elements of bicycle messengering that might appeal to certain sectors of society. For instance, the associations of messengering with fashion and youth are overt, with references to attitude and apparel frequently employed to reinforce the idea of an exciting, vibrant, coherent sub-culture.

'Negative-Outside'

The antithesis of positive representations of bicycle couriers are the negative stereotypes propagated by commentators unimpressed with the behaviour, attitude and appearance they perceive messengers to inflict on the urban environment. The US environmental transport organisation Transport Alternatives attempts to explain anti-messenger sentiment in New York City by suggesting that messengers are, on the one hand, scapegoated for 'problems that aren't of their own making' such as congestion and pedestrian ill behaviour and on the other hand, exacerbate negative stereotypes by cycling in a manner which pays little regard to traffic regulations or other road users' sensibilities (Transport Alternatives, 2001). One year after the Weatherby article cited above, Peter Morris, also writing in The Guardian, reported on the very same New York messenger community, but in a substantively different way. His article starts with the assertion that 'a new menace is haunting the streets of New York ... bicycle messengers', before going on to suggest that 'New York's bicycle messengers are being spoken about in the same breath as muggers' (Morris 1987). Although this article's purported intent is to explain the reasoning behind a scheme to introduce licensing legislation forcing messengers to register with the city administration, its tone is decidedly negative.

These negative sentiments run concurrently with the positive through the same time frame and in the same news media channels. In 1992, the journalist Kate Alderson wrote about the relationship between couriers and motorists in *The Times*:

The taxi driver bellowed: 'It's a one-way street you half wit', as he swerved to avoid a bicycle courier pedalling furiously up Lancaster Place in central London during yesterday morning's rush-hour. He stopped his taxi and threw up his arms. "What's the bloody highway code there for? Obviously not for idiots like him and they think they're the kings of the roads, they're like highwaymen. I'd like to knock a few of them off their bikes, it might knock some sense into them.' Every day cyclists jostle and joust with taxis, buses, and cars on crowded roads in British cities. Sometimes they collide, often they have near misses, but it always seems they are in conflict with each other. The cyclists, motorists insist, are a menace (Alderson, 1992).

The article goes on to detail problems confronted by both cyclists and motorists. However, the only other reference to bicycle messengers, as opposed to commuting or recreational cyclists both of whom are represented as responsible road users, paints a negative picture:

Marcus Joyce, a bicycle courier dressed like a fluorescent stick of rock, admits cycling aggressively: 'I sometimes run over a few pedestrians' toes and ride quite furiously sometimes, but it's only because I have to get to places quickly. Couriers get the rough deal with taxis, they carve you up all the time. I've left my imprint on the side of many a taxi' (Alderson, 1992).

The reader of this newspaper article is left with the impression that the taxi driver's frustration and subsequent assertion that he would 'like to knock a few of them off their bikes' is an understandable sentiment when faced with such provocation and irresponsibility. The *Evening Standard* reported in 1995 that the police in central London were 'cracking down on bicycle couriers who plough through busy streets and pavements, endangering themselves and others'. In fact, a close reading of the article reveals that the police campaign was aimed at all urban cyclists, not just bicycle couriers, but nevertheless the *Evening Standard* was depicting bicycle messengers as the embodiment of dangerous cycling. In the quotations the journalist procured from the police and policy makers, there is not one reference to bicycle messengers. The association between dangerous cycling and messengers was manufactured by the journalist, to the point where the article was entitled 'Dangerous bicycle messengers face arrest' (Mcmahon 1995, 14).

This style of journalism helps fix an image of the bicycle messenger as a particular source of concern for not only non-cyclists, but cyclists too. The idea is that not all cyclists may be irresponsible but all cycle couriers are, and a significant fear among many cyclists is that they will eventually come to be tarred with the same brush; that left unchecked, 'irresponsible' messengers will give all cyclists a bad name. 'Negative-outside' accounts of messengers thus reproduce stereotypes, of messengers and their typically 'illegitimate' practices, which are almost universally condemned. Cyclists' fears that such media accounts might result in the contamination of all cycling may not be unfounded; explicit references to bicycle messengers from this negative-outside position have declined in recent years, whilst negative representations of certain types of 'irresponsible' urban cycling continue. In contrast to the *Evening Standard* article, which explicitly refers to messengers, an article in *The Scotsman* uses many of the motifs applied to bicycle messengers in previous writings, again drawing distinctions between the responsible and the irresponsible. The correspondent George Kereven writes:

I have taken against bicyclists and their preposterous cult. Not to put too fine a point on it, I have a pet hate of the dangerous two wheeled monster and the surreal attempt by spineless politicians to spend a fortune of my tax money placating the tiny bike lobby.

How often each day do you see cyclists calmly shooting the lights while their car-bound compatriots wait for the amber? This blithe arrogance is obviously dangerous, foolhardy and problematic for others (Kereven, 2002, 12).

In 2002, the writer Tony Parsons wrote a column in the *Daily Mirror* applying many of the adjectives used to describe bicycle messengers in previous media articles, but without actually mentioning messengers:

Over the past few days I have seen hairy-armed men on bicycles drive up one-way streets the wrong way, weave their way through densely populated pavements, scream abuse at innocent motorists, gesture violently at terrified pedestrians and above and beyond all of these crimes completely ignore red lights. Red traffic lights mean nothing to the L ycra lout, the psycho cyclist, the berk on a bike (Parsons 2002, 21).

Referring to a piece of proposed European traffic legislation, Parsons goes on to say: 'So if some cycling hooligan on a Tour de France-style racer goes through a red light and ends up smeared all over your windscreen like a big fat Lycra-clad bug, you the motorist will be at fault. Total madness' (Parsons 2002, 21).

The recent decline in explicit references to bicycle messengers from a 'negativeoutside' perspective indicates two possibilities. The first is that bicycle messengering and bicycle messengers are now so much a part of urban life they have become unworthy of comment this might imply either acceptance or indif ference on the part of journalists who might previously have presented messengers negatively. The second, as I suggested above, is that there has been an increasing marginalisation of urban cycling generally, and an accompanying demonisation using the language previously reserved for messengers of all urban cyclists. 'Problematic' bicycle messengers now merely form part of a wider irresponsible category, encompassing all urban cyclists. We are seeing, in other words, the conflation of negative connotations previously ascribed to defined communities of cyclist, such as bicycle messengers or BMXers, into urban cyclists in general. With no distinction made between cyclists, the dominant perception is that any cyclist can be dangerous and irresponsible. This conflation might be exacerbated by recent increases in urban cycling in London, from where many journalistic narratives derive; messengers have become a smaller proportion of the 'problem' as cycle commuters have become more prominent. As we will see later, according to this 'negative-outside' standpoint urban cycling is thereby positioned as an activity that is engaged in by people who are irresponsible and dangerous (for another cultural analysis of the contemporary demonisation of the urban cyclist via the mass media, see Horton, this volume).

Despite the lack of recent explicit pejorative media surrounding couriers specifically, there is a feeling within groups of messengers that they have a particular reputation that is unrepresentative of them. This is evident when talking to messengers. On several occasions during interviews, messengers working in different parts of the British Isles described how they thought the wider community saw them. In London Chippy Keith said: 'I think the wider world probably sees us as a bunch of vagabonds' (14.05.03). Another London messenger, Disa, explained how she felt in Ireland: 'I lived in Dublin for a while and I was a bicycle messenger but I didn't know anyone outside of the messengers, and pretty much the same here. Probably Dublin messengers were considered scumbags, the lowest on earth' (05.06.2003).

In Cardiff, Edwardian Light Entertainer corroborates this view of messengers' perception of the wider population's opinion of them:

They get annoyed with the fact that you're getting where you want to go quicker than they are, and they're stuck in traffic, which is a bit annoying if you are in a car ... they probably look at you and think 'you're a cocky little bastard, jumping the light, I'm going to get you for that' ... They just hate the fact that you've just overtaken them on a bike. They just

think 'he's taking the piss out of me' ... I mean taxi and bus drivers hate us don't they? They really do. I mean I don't know who's worse. They're as bad as each other really, we share the road too much with them (19.02.2003).

'Positive-Inside'

There is not a huge amount of material produced by cycle couriers or ex-cycle couriers for consumption outside the courier fraternity.² For example, the longest running bicycle messenger 'zine' in the UK, *Moving Target*, has been an important source of information and writing about bike messengering in London, but it is sold almost exclusively to bike messengers at specific 'hang outs', such as pubs frequented by couriers, messenger events or messenger firm offices, and it is distributed by active participants in the messenger scene. Much of the documentary material produced by cycle couriers or ex-couriers presents a positive picture of a coherent sub-culture. A 1985 article by Bob McGlynn, 'Road Warriors and Road Worriers', provides a good example:

All in all there's a great deal of camaraderie among us as the joints are passed and tools are shared it is especially apparent when we rush to the side of a biker who's been hurt in an accident in this bohemia of the streets. The hellos exchanged in elevators, the whistles, the bikes, the speed, the nicknames, dread locks, colorful or torn clothes, sleek biking clothes, grimy and sweaty faces, fingerless gloves, and the superficial command of the day definitely makes bikers a 'cool' group. The city is 'ours' as we have an aura of strength that lacks any trace of uneasiness or intimidation; we know who we are and where we are going and for this we reap a type of 'respect'. People will 'stand aside' as we flash in and out of offices (McGlynn, 1985).

The 'positive-inside' position often comprises references to how messengers are able to survive and even celebrate a way of working, and way of living, that most people would not be able to tolerate a theme that will be explored further. The descriptions of couriers in the urban environment are a rich source of romantic metaphor and imagery. An ex-courier from Washington DC, Cybergeo, writes: 'Being a courier, one quickly realizes, is much more than a way of earning a living – it's a way of life... couriers have not only learned to navigate through chaos, they have embraced it. In this way, they are true creatures of the urban wilderness' (Cybergeo, 2001).

In terms of defining elements to be celebrated and respected from within the sub-culture, a Canadian 'zine', *Sprocket Rocket*, produced a tongue-in-cheek but nevertheless telling piece entitled 'Guidelines for the Rookie Courier'. In it the author exploits many features of messengering to give an impression of a community well aware of the stereotypes ascribed to it. In the list of ten top tips for new messengers are '(6) Swearing on the radio is cool!: No matter how many times your dispatcher has warned you against it or chastised this type of behaviour from others, it will help label you as a "rebel" and a "free thinker", and '(9) Come to work hung over

² An exception is Travis Culley's autobiography of his life as a messenger in the US (Culley, 2002).

at least three times a week: This will not only give you a conversational opening with whoever else happens to be hung over that day, it will also help bolster your reputation at your company as a "party animal" (Sprocket Rocket, 2002).

A Washington messenger, Kelvin Owen, who went to work in a small town in the south of the US, offers another 'inside-positive' perspective. His experiences appear to confirm the perception held by many couriers, that there is something universal about courier 'culture' and the types of people engaged in couriering, irrespective of geographic area and setting:

This intimate number affords quite a bond to be formed between these southern gents. Smiles abound when passing one another going up and down the many, many hills of Richmond... These guys can jump their track bikes and in mid-air get a tattoo, a piercing and even roll a joint. Impressive (Owen, 2003).

The 'positive-inside' perspective makes explicit ordinarily tacit assumptions about the benefits of messengering and cycling in general. This is both within the community cycle messengering is good for cycle messengers and outside of the community cycle messengering is good for cities generally.

'Negative-Inside'

Alongside the positive perspective expressed from an insider position, there exist examples of writing which paint a negative picture of messenger life. This 'negative-inside' position tends to accentuate themes of exploitation, vilification, victimisation and marginalisation. In 1993, *The Times* ran an article by an ex-messenger, James Hepburn:

I had seen the job as a passport to sun-tanned legs. It had turned out to be an ante-chamber to hell. The Victorians sent little boys up the chimneys. We send slightly bigger boys and girls out on the streets for ten hours a day to put their mouths over exhaust pipes, lie down under the wheels of taxis and listen to directions on short wave radios in a language that might be Siamese. The morbidity and mortality rate is higher than most Third World countries (Hepburn, 1993).

In a report titled 'Choking us to death air pollution and its effects on bicycle couriers', a Canadian courier, Joe Hendry, has compiled a comprehensive secondary source evaluation of the potential damage to bike messengers of prolonged exposure to polluted air. The presentation of dangers such as exposure to air pollution or being hit by a motor vehicle is often presented as a 'reality' of the work to be expected. The difference between positive and negative accounts is that the same 'reality' is presented and used for different purposes. The 'freedom' of the independent subcontract style of employment becomes, in Hendry's piece, exploitation (Hendry, 1999).

In an article published in the *San Francisco Weekly*, another dangerous aspect of the job is presented in negative terms. Rather than being used to consolidate the image of glamorous, devil-may-care risk takers, dangers are presented as a depressing 'fact of life' for bicycle messengers:

The government doesn't keep statistics for on-the-job injuries, but messengers get banged up almost as often as NFL running backs. "Everybody gets a temporarily disabling injury usually in their first two years as part of a learning 'experience'", says longtime messenger Howard Williams. Typical accidents include getting "doored" in the ribs, cut off by cars making right-hand turns, and broadsided or run down from behind. Such hazards make messengers unusually fond of black humor. "What did the messenger say when he stopped smoking pot?" jokes one courier zine. "This job sucks.' And the sucky aspects are a big reason why the half-exhausted workers are gathered at the ILWU hall on this rainy night (Anderson, 2003).

Clearly the 'inside-negative' view is not negative in the same way as the 'outsidenegative' position. A paradox runs through much secondary source material, as well as the interview data gathered in the course of my research. By returning to McGlynn's article, previously presented as an example of a 'positive-inside' account, we can observe how a more negative narrative often parallels the positive one. Having provided the reader with an image of a bohemian community who 'own' the city and have 'an aura of strength that lacks any trace of uneasiness or intimidation', McGlynn continues:

On the other hand, biking can be a grueling fuck of a job: dealing with the traffic, weather, cops, stolen bikes or bike parts, stuck up office workers and bosses, bus tailpipe in our faces, pollution, discrimination, painful loads, exhaustion, and the accidents we all eventually have ... the real social relationship we have with the companies is like that of any other boss/worker situation (McGlynn, 1985).

It could be suggested that McGlynn is simply giving a full account of the experience of being a messenger. However, the extremes at which the positive and negative aspects of the job are located within the narrative accounts of messengers themselves are an important part of establishing both an identity as a messenger for the individual, and a cultural identity for messengers as a collective. Another example of this dual narrative comes from the feminist website *Women In General Magazine* or *W.I.G. Mag.* A woman actively involved in the New York messenger scene writes:

Like any alternative lifestyle, there are many drawbacks. New York City is the harshest of messenger forums with the highest bicycle messenger mortality rate. Messengers garner little respect from clients, pedestrians or drivers, and there is little hope for benefits or raises as there is no proverbial ladder to climb (Turner, 2001).

This account switches in an instant from espousing the positive aspects of the work to the negative aspects. This willingness to express seemingly contradictory positions is not uncommon when talking to messengers, and there are many examples of this in my ethnographic data.

Image - It's Good to Be Bad?

Throughout the interview and participant observation phases of my study messengers made constant reference to 'image'. It seemed that they were acutely aware of a social perception of themselves. The extent to which they controlled this image was a source of varied opinion. Nonetheless, the issue of image and presentation was acknowledged. The sort of dual narrative highlighted in the previous section where the same person might express an overtly positive opinion of messengering and then, almost in the same breath, present an overtly negative opinion exists in two further forms when it comes to talking about image. The first concerns assumptions about how the rest of the world sees messengers in opposition to how messengers see themselves. The second is the distinction between how the messengers felt about the work before they had started, or at the onset of their careers, and how they felt about it having worked for a number of months or years. In both Cardiff and London, reactions to questions concerning preconceptions bike couriers had had before they started working were almost uniformly positive and concerned with image. A London messenger, Cargo Chris, responded in a typical fashion to the question 'before you started work did you have any preconceptions as to what messengers or messenger work would be like?':

It looked cool. Yeah. And nutcases. They looked like a cross between Mad Max and a road warrior, something like that, you know. And still, you know, you're out on the road you can still see them. You can see the freedom. You know like surfers or skateboarders. You know, you can see the freedom (05.06.2003).

In Cardiff, Slam related the image to cycling specifically:

It is a kind of cool image. Earning money cycling is cool, no doubt about that. I love being outdoors and being paid to ride my bike is a good thing and it's definitely a bonus that it's kind of perceived as quite a good job ... erm, my girlfriend likes it (18.03.2003).

Another Cardiff messenger remembered seeing a messenger in the city before he started work as a courier. It was not just a preconception, but an actual moment that stuck in his mind:

I remember seeing Simon actually. I've never met him but I remember seeing him, when I was around the main building one time. I remember just seeing him like hovering around Cathays Park, I remember his dreads and stuff so it must have been him, because they were really long ... erm ... and I remember thinking ... and it was winter as well, I thought that looks really cool (12.12.2002).

The overwhelming impression given by interviewees was that they had viewed the work of bicycle couriering as having an attractive image to them before they had gained much direct personal experience of the work. My own experience was one where a preconceived image had an impact on my feelings about the work. In 2002, I wrote about my feelings of intimidation and nervousness when first meeting my future employers and colleagues (for more details, see Fincham, 2006). It is obvious that I did not feel 'cool' enough to be associated with these people:

Although I was excited at the prospect of being a courier it was not without concerns. I had seen messengers from Hermes at various events and always viewed them as remote, arrogant and very cool. Despite being nervous I turned up at the Hermes office, as

instructed, for an 'interview'. The office was as intimidating as I had anticipated. There were two couriers sat in their Lycra, smoking roll ups, reading cycling magazines, and Liam, the radio controller for the day, perched on a 1970s high-backed, black swivel chair, also with the obligatory cigarette wedged between his lips (ethnographic field notes).

It is interesting to note that the appeal of messengering to certain people is despite a sense that messengers are perceived negatively by the general population. The *Transport Alternatives* Website cited earlier is an example of an attempt to explain why messengers have a 'bad image' but without critically interrogating the sources of such an image. As has been illustrated, the popular media have played a part in creating both positive and negative images of bike messengers, but the overwhelming assumption seems to be that messengers have a 'bad' image. One example of this assumption comes from *Cycling Plus* magazine:

The media's view of couriers, or messengers as they're also known, has never been a lofty one. It's encapsulated by the image of a reckless male cyclist in his twenties adorned with tattoos, a nose ring and plenty of attitude to boot. But the reality is far different (Gilbert 2003, 61).

If there is a general acceptance that messengers have a negative image in the media, yet it is an attractive job for some young workers, then perhaps this negativity is specifically used by couriers to maintain a particular 'outside' status. The degree to which messengers accept this 'outside' status has been demonstrated in both the ethnographic and interview phases of my study. The desire to be seen as independent from traditional modes of work is expressed differently by different people, but the perception of a general absence of regulation of the working individual by a 'boss', the large amount of temporal control, and the absence of the kinds of surveillance associated with 'traditional' employment, are all major factors in how messengers see their work, and thus themselves, as 'outside' of normal working life. The sentiment that messengers are their 'own boss' and not part of the '9 to 5' working environment was explicitly expressed in the vast majority of my interviews with couriers.

'Outsiders' and 'Mavericks'?

Part of the image propagated by messengers is that of the 'maverick', an individualistic, unorthodox, independently minded person working in a hostile environment and adapting to situations as they arise. Notions of individualism and autonomy, and a sense of being 'unorthodox', are clearly important to messengers' identities. Unsurprisingly then, claims to such unconventional identities are widely articulated throughout couriering, and were common in my interviews, particularly in London. For example, Chippy Keith in London said: 'a lot of people, the ones that I know, are very individual in their attitude. They do their own thing. There's no leaders as such, they all lead themselves' (14.05.2003). Another London messenger, Catwoman, accentuates the individualistic nature of couriers: 'I think that the people are making their own choices. They're not just doing whatever they're told to do. They're the sort of people who've got wider boundaries maybe. They're open to

190

looking at things maybe differently' (14.05.2003). And Disa highlights the idea of freedom often associated with the work: 'Well maybe there's something ... that free spirit thing, maybe there's something of it. And couriers are also a bit of an outcast ... outside. There's very few rules for couriers' (05.06.2003).

An emphasis on 'freedom' and 'attitude' were common in the narratives of those I studied. The idea of the 'maverick' is extremely attractive as it appears to describe the type of personality many couriers assume is required for the work. In the same way that the sociologist Georg Simmel describes the use of fashion as a method of cultural demarcation between a particular group and the rest of the world, these narratives become a way of understanding the 'self' as an 'outsider'. They form part of a process that informs the wider community of the 'outside' status of bicycle messengers, whilst communicating the social status of the group to others within the group. The constant reiteration of this position makes it a self-fulfilling prophesy

messengers believe it and behave accordingly. In his work on tattoo collectors, Vail (1999) talks about the process of 'affiliation' with reference to the work of Sutherland in the 1930s and Matza in the 1960s. Whilst I find the language of 'deviants' and 'deviance' problematic despite the best ef forts of academic writings the words are loaded with moralising judgements the concepts of mar ginality and culture are nonetheless important. Vail explains that from a process of affinity with a group where a person desires 'to become deviant' (1999, 259) an individual might progress to the stage described as 'affiliation'. In this stage Vail suggests that 'deviance is taught in symbolic interaction with successful deviants' (1999, 261). Talk of maverick status in bicycle messenger circles transmits the narrative to be adopted by the rookie, the novice and the uninitiated. In much the same way that novice tattoo enthusiasts learn to become collectors from those already established in the community, bicycle messengers learn their narrative from experienced messengers established and holding sway within the messenger community. However, the maverick image valued, reproduced and learnt by many bike messengers was not universally appreciated. Wyatt Earp, the chair of the London Bicycle Messenger Association (LBMA), was irritated by it:

The identity is so strong but the stuff about, all that bullshit stuff about 'I'm a maverick', it's just nonsense, utter nonsense. You know you need some sort of organisation to have a courier company in the first place. So by working as a courier you are accepting some sort of organisation. Somebody sits there and tells you what to do, you know (07.06.2003).

For Wyatt there is an irreconcilable gap between the self-identification of messengers as mavericks and the affiliation of individuals to an identifiable structure or organisation. This view could in part be informed by the need for the LBMA to convince messengers that a collectivist approach best serves their interests and that the LBMA is the organisation established for that very purpose. Having said that, Wyatt has a point. The idea of an identifiable, even homogeneous, group of similar mavericks is contradictory. Wyatt's view may also indicate that the more experienced messengers are aware of the structures governing messengering that contradict talk of 'freedom' and 'mavericks'. This is not to say that messengers do not possess some of the traits typically ascribed to 'mavericks', but rather to suggest

that the most important function of messengers' talk and positive evaluation of being 'maverick' is to reproduce a distinctive messenger sub-culture and to build subcultural identities. The notion of a coherent sub-culture relies to a certain extent on conformity. Terry Eagleton points out that marginal communities 'tend to find the larger culture stiflingly oppressive' (Eagleton, 2000, 42), and that this unifies a sub-culture in opposition. However, in establishing an identifiable sub-culture the marginalised inadvertently engage in 'transposing into local terms the global closure' that they find distasteful. In its most dramatic formation Eagleton claims 'the result is a kind of pluralized conformism, in which the single universe of Enlightenment, with its self-sameness and coercive logic, is challenged by a whole series of miniworlds displaying in miniature much the same features' (Eagleton, 2000, 42).

The sub-culture remains a form of culture with components of replicability, ascription and conformity. Perhaps the 'true maverick' can engage no more with a sub-culture than with hegemonic culture.

Conclusion

Bicycle messengers identify closely with a description of themselves as marginal or outside of the mainstream in terms of their work, their lifestyle and, consequently, their status on the roads as cyclists. The image of cyclists, and in particular bicycle messengers, as being engaged in a marginal activity is perpetuated by media representations, both negative and positive. There are consequences to these representations in terms of the acceptability of cycling as a reasonable thing to do and of cyclists as being considered reasonable people. There is a complex relationship between insider and outsider perspectives which perpetuates certain views about types of cyclist and cycling itself. As has been demonstrated with reference to cycle messengers, inside perspectives are not necessarily supportive of positive images of cyclists. Negative portrayals from an inside perspective draw distinctions between types of cyclist which further marginalises cycling as an activity engaged in by particular types of people, not as an activity that can be engaged in by everyone. Messengers are presented as the most extreme example of people involved in the marginal activity of cycling. Through fashion, riding style and social exclusivity messengers actively contribute to the construction of couriering as marginal, dangerous and unconventional and the maintenance of this image enables the subculture of messengering to flourish as an 'outsider' phenomenon.

Whilst this chapter has concentrated on bicycle messengers there are more general associations that can be made using the positive-outside, negative-outside, positive-inside, and negative-inside positions in media with regard to cycling. For example, positive-outside representations often derive from lifestyle commentators and government health promotion rhetoric. An emphasis on the health benefits of cycling coupled with the perception of freedom that is associated with cycling will be familiar to anybody who reads UK Sunday newspaper supplements. Negativeoutside representations are common in journalistic narratives, often in 'comments' sections or editorials, examples of which have been detailed earlier in this chapter. They also emanate from sections of the car lobby. In these accounts cyclists are portrayed as disrupting the normal conventions of road traffic and road manners; both cycling and the cyclist are to be feared (see Horton, this volume). Positiveinside representations of cycling are provided by cycling enthusiasts, where the lived experience of the benefits of cycling are reported to encourage the uptake of cycling. The negative-inside perspective is provided by cycling and environmental campaigners, where the potential benefits of cycling are acknowledged, but the conditions for cycling are presented as dangerous, unpleasant and in need of reform. As has been illustrated with the specific example of cycle messengers, these competing representations of cycling inform general perceptions, and thus have consequences for cyclists and non-cyclists alike. In my view, the current primacy of the negative-outside discourse accounts, to a large extent, for the marginalisation of urban cycling, especially among the young. The phenomenon of parents driving their children to school because the roads are 'too dangerous', thereby increasing the levels of road traffic, is all too familiar. For as long as the negative-outside view of cycling persists as the dominant voice in mass media debates about urban cycling, we can expect the ongoing marginalisation of cycling within popular and general opinion.

Finally, it is interesting to note that the attractions of cycling to messengers are the very things identified as disincentives to cycling in conventional accounts of the reasons for declining cycle use danger, alienation, difficulty and effort. There are perhaps similarities between cycle messengers and other cyclists such as cycle campaigners, BMXers and even urban commuters in that the sub-cultural affiliation that their *type* of cycling allows access to is as important as the cycling itself. These peripheral sub-cultural or 'lifestyle' activities are particularly difficult for civil authorities to encourage or nurture as it is the fact that they are outside of conventional systems of governance that attracts participants to them. In addition to this difficulty of the civil legitimacy of the behaviour of cycle messengers

with particular reference to road traffic laws and deference to other modes of transport there is the cultural construction of cyclists as an 'other' and cycle messengers as an extreme 'other' in public consciousness that remains the attraction for some and repulsion of others to cycle messengers, and all cyclists, as legitimate road users.

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Index

A13, London 35-7 academic interest 1, 8-10 access journey data 69 accidents 53, 133-4, 140-1 activism 123-4 Adams, John 136, 141 advertising cycle racing 59-61 affiliation of bike messengers 191 age factors 74-5, 180 aggregate-level helmet efficacy 140-1 aggregate models 70-1, 79 air pollution 187 Alderson, Kate 183 Alley Cat races 182-3 'alternative' development model 4-5 amateur sports 48, 161 Anderson, Miss (UK racer) 55 Anderson, Tillie (US racer) 55 anti-car debate 91 anti-domestic cycling 163-4, 172-3 see also domesticity Arrive Alive code 139 artefactual approach 115 Asia 2, 3 assisted cycles 124 audiences, cycle racing 47-8, 50-62 Auge, Marc 25, 27-8 Australia 140-1 automobility 2-3, 5-6 evolinear models 121-2, 124-9 fear of cycling 134, 135-6, 138-9, 142 - 7historical perspectives 13-14, 117 in-vehicle space 69-70 monitoring 68-9 'non-places' 27, 29-30, 36-9 representations of cycling 17, 183-4, 192 - 3see also cars; 'motorist' identity; traffic conditions

'bad' messenger image 188-90

Bannister, D. 42 barriers to cycling 14-15, 67-82, 84-5, 89, 133 Bartleet, H.J. 'Sammy' 98 Baudelaire, Charles 100-1, 109-10 behaviours domestic cycling 166-7 gender 89-90 identity 84-6 'other' cyclists 92-4 Beijing, China 2, 3 belonging 26 Benjamin, Walter 100 bicycle boom 1894-97 99, 100-2 bicycle gymkhanas 168, 169-72 bicycle messengers 16-17, 39-41, 179-95 Bicycle Union of Great Britain 48, 158–9 bicycles 'closure' of form 98-9, 103-4 concept of 115 cultures 125-9 development 49-50, 116 masculinity 156-7 modelling technologies 114-18 motorcycle 'transition' 124, 125 origins 1 ownership 73-4, 84, 91 see also individual types Bijker, Wiebe E. 98, 114-15, 156 bike see bicycle biographical factors 12 black-coloured bicycles 108 Blackburn, Rosa 54, 55, 58 the body fear of cycling 135 sensory experiences 28-31, 35, 38, 41-2 speed 37 women's cycle racing 52 see also physical factors boneshaker bicycles 156-7 boom period 1894-97 99, 100-2 Bottomley-Firth, James 98

Bourdieu, Pierre 2 bourgeois society 153-6, 161-3, 165-72 see also middle classes Britain see United Kingdom Cambridge, England 87-8, 93-4 Canada 99-100, 158-61, 163-4, 169-72 see also North America Cardiff, Wales 181, 185-6, 189 cars historical perspectives 106, 111 ownership 72-3, 85, 91, 121 see also automobility censuses 69.73 CFE see Cycle-Friendly Employers' scheme change historical 118-20 opportunities 125-9 technological 122-3 Chelsea Rationalists 53-4 children 138-9, 140-2, 167-8, 171-2 China 2.3 choices 69-71, 79, 140 see also motivations circus riders 52-3, 54-5 cities 2-4, 31-41 bike messengers 179-95 domestic cycling 167, 171 fear of cycling 134 gender 153-4 sensory experiences 25-45 see also individual cities class cycle racing 49-50 domesticity 162 gender 153-6, 161-2, 172 quantitative analyses 74-5 twentieth-century history 97, 99, 101-2, 105 - 8see also bourgeois society climate 69, 76 'closure' of bicycle form 98-9, 103-4 clubs for men 157-61, 172 commercial cycle racing 48, 61-3 community 179-95 commuting 84–96 see also work journeys competitive cycling see cycle racing confidence intervals 68

conjugal relations 167-8, 171-2 conspicuous consumption 7, 156, 162 constructed fears 137-45 consumption see conspicuous consumption control factors, decision making 71 Cope, A. 73, 75 Copenhagen, Denmark 73 counter cultures 180 couriers see bicycle messengers Cox, Peter 1-24, 113-31 Cresswell, T. 26 Critical Mass 145, 146 CTC see Cyclists' Touring Club cultural factors 12, 75 bike messengers 180, 181-3, 192-3 fear 137-8, 147 sensory experiences 26, 42 velomobiles 125-9 workplace identities 88-90 Cycle-Friendly Employers' scheme (CFE) 87-8, 93-4 cycle lanes 143 cycle racing 35, 47-65, 160 cyclecars 117, 125 cycles see bicycles 'Cyclesense' campaign 141-2 Cycling England organisation 13 cycling levels 2-6 choice 69-71.79 monitoring 68-9 cycling proficiency scheme 138 Cyclists' Touring Club (CTC) 140, 142, 143 - 4dandyism 100 danger 184-5, 187-8 see also fear of cycling data sets 68-9, 70-1 Davies, D.G. 72-3, 76, 86 de Certeau. Michel 33 Dean, J.S. 138 decision making 71 demand factors 51-3, 62 democratisation of mobility 14

Denmark 4, 6, 73

design of cycles 70, 99, 103-6, 115, 117,

departures 26

destinations 26

122 - 3

development discourse 4-5, 8, 119 deviant cyclists 17, 146, 181, 191 see also fear of cycling diamond frame bicycles 99, 103-4, 115-16, 122 diet 54, 55-6 diffusion theory 71 disaggregate models 70-1, 75 discrete choice models 70-1, 75, 77-8 displays 169 see also cycle racing distance of journeys 72-3, 84 diversity of cycling 1-2, 7 domesticity 155-6, 161-3, 165-72 see also anti-domestic cycling Domosh, M. 154, 162 dress codes 53-4, 168, 169 see also uniforms drivers see 'motorist' identity drop-frame bicycle see ladies' bicycle Dutch-style bikes 34-5 Dutrieux. Hélène 54-5 dwelling concept 25, 26, 27, 42 dynamics of racing partnerships 56-62 Eagleton, Terry 192 earnings see salaries Eastnor Castle, England 165-6 economic value hierarchy 121 education 138-9, 180 efficacy of helmets 140-1 embodied experience see (the) body embourgeoisment see bourgeois society Emmerson, P. 76 emotional barriers 133-52 engineering perspectives 8-9 engineers as cyclists 90 England see United Kingdom entertainment cycling 51, 56 entrepreneurs 56-62 environmental factors 75-6 equity of helmet-wearing 141 ethnographic fiction 30 Europe 6–7, 179–95 see also individual countries; Northern Europe Evans, M. 28 evolinear models 120-9 evolutionary narratives 118-29

expenses payments 47 experience see sensory experiences family relations 167-8, 171-2 Farnsworth, Dottie 53 fear of cycling 15, 133-52 Feenberg, A. 120 fees see salaries of racers feminisation 155-6 see also women fictional strategies 30 Field, P. 136 Fincham, Ben 16-17, 179-95 flaneur concept 100-2, 108-11 flexibility 72 Flyvbjerg, B. 31 Fournel, Paul 10 'framing' cycling 6 France 48, 52-3, 55, 157 Furedi, F. 137 futures of cycling 17-18, 113, 128 Game, A. 29 Gandy, M. 27 Gardner, G. 74 gender 6, 15-16 bike messengers 180, 188 cycle racing 47-65 fear of cycling 134-5 nineteenth-century 153-77 sports 11 technology relationship 89-90, 120 twentieth-century 98-9, 102-3 General Household Survey 73 'gentleman' cyclists 160-1 geographical perspectives 25, 27, 28, 153-77 Germany 4 Gibson, - 29 Gilbert, Cass 180 global mobilities 2, 18 'good' messenger image 188-90 government representations 146 The Green Bicycle Case 107-8 Griffin, E. Scott 170 Guys, Constantin 109 gymkhanas 168, 169-72

Harberton, Viscountess Lady 53

Hardy, Stephen 59 Harris, Reg 61 Harvey, David 108, 157 Harwood, Monica 54, 56 health effects 9, 53-5, 75, 136-7, 192 hearing senses 33, 34-5 helmets 9, 140-2 Hendry, Joe 187 Hepburn, James 187 Hercules Cycle & Motor Company 101-2 Herlihy, David 115-16 hierarchical models 71, 120-2 'high grade' bicycles 107 highwheel bicycles 153-4, 156-7, 159-61 Hillman, M. 141 hills 75-6, 78, 79-80 see also topography Hillsdon, M. 75 historical perspectives 8, 10-11 change 118-20 gender and social geography 153-77 technologies 13-14, 113-31 twentieth-century 97-112 women's cycle racing 47-65 'hobby horse' bicycles 97, 100, 115 Holland see Netherlands home life see domesticity horse-drawn vehicles 160 Horton, Dave 1-24, 123, 133-52 'the hour' event 122 Hutton, Nellie 59 Hyde Park Corner, London 39-41 I-CE see Interface for Cycling Expertise ICU see International Cycling Union identity 12-13, 83-96, 135, 145-7, 179-95 Illich, I. 119 image 179-95 in-vehicle space 69-70 India 3 individual choice see choice influencing factors 69-71 information and communication technologies 17-18 Inglis, Harry 109

Ingold, T. 26, 34, 39 innovative technologies 122–3 'insider' messenger image 181–8, 192–3 intensity of sensory experiences 30 Interface for Cycling Expertise (I-CE) 5 International Cycling Union (ICU) 50 *see also* Union Cycliste Internationale investors in cycle racing 51, 56–62 irresponsible/responsible distinctions 184–5

Jenks, C. 102 Jones, M. 78 Jones, Tim 12, 67–82 journey distance 72–3, 84 journey purpose 69, 72, 73–4, 84–5

Kereven, George 184 Kifer, Ken 136–7 kinaesthetic sensations 35, 37, 41 Kurttila, T. 34

ladies' bicycle 49 Lancashire County Council 139 landscape 25, 26, 27 LBMA see London Bicycle Messenger Association leisure cycling see recreational cycling Leonard, Eileen 120 light cars 117, 125 lightweight bicycles 108 linear histories 98, 120-2 linkages in cycling history 116-18 'Lisette' (racing cyclist) 55 local context of identity 94-5 Local Transport Plans 67 Locomotives partnership scheme 5 London Bicycle Messenger Association (LBMA) 191 London, England 4, 30-45, 180-1, 184, 190 - 1Lyons, G. 42

McGlynn, Bob 186, 188 McGurn, J. 97 Mackintosh, Phillip Gordon 15–17, 153–77 magazines 101 *see also* media representations manufacturers 56–62, 105–6, 116–17 *see also* production of cycles marginalisation of cycling 123, 145–7 bike messengers 179, 181, 191–3 velomobiles 114, 116, 127–8 marketing women's cycle racing 58–61

200

married couples 172 masculinity crisis of 155-6 technology relationship 156-7 see also men mass media representations 145-7 see also media representations mass spectatorship 50, 56 see also spectator sports Massev, D. 38 mathematical models 70-1 'maverick' messenger image 190-2 Max-Neef, Manfred 7 Mavne, K. 142 MBC see Montreal Bicycle Club meaning construction 25-45 media representations 145-7, 179, 181-8, 192 - 3medical perspectives 9 men cycle racing 50, 53-4, 58-62 cycling levels 6 flaneur concept 102 nineteenth-century 153-77 spaces and places 157-61 technology relationship 89-90 women's racing audiences 52-3 messengers 16-17, 39-41, 179-95 methodological developments 79-80 see also quantitative analyses middle classes 49-50, 105, 106 see also bourgeois society; class Mills, G.P. 104 Mintel International 74 'mobilised' gaze 110 mobilities definitions 2 democratisation 14 futures of cycling 17 identity 94-5 meaning 10 sensory experiences 25-45 time 5 Mochet, Charles 117 modal shift 84-5, 90-1, 95 mode choice models 71 modelling cycling 69-71, 75, 77-9 technologies 113-31

transport 85-7, 113-31 modernity 4, 101, 108-11 monitoring cycling levels 68-9 Montreal Bicycle Club (MBC) 158-61 mopeds 117 moral discourses 6-7, 162, 167, 168-9 Morris. Peter 183 motivations 86, 89 see also choices motor cars see cars motorcycles 117, 121-2, 124-8 'motorist' identity 86, 90-3 see also automobility motorways 143 mountain biking 73-4 see also off-road cycling movement see mobilities Munby, Arthur 52-3 Murder Most Foul (Dean) 138 narrative metaphor 30 National Cycling Network 73-4 National Road Traffic Estimates (NRTE) 68 - 9National Travel Survey (NTS) 68-9, 73 'negative-inside' representations 182, 187-8, 193 'negative-outside' representations 181, 183-6.192-3 Netherlands 3-4, 6 'new' cycling spaces 142-5 'New Women' market sector 59 New York City messengers 183 New Zealand 48 newspapers 101, 146-7 see also media representations Niagara, Canada 169-72 nineteenth-century

nineteenth-century bicycle boom 99, 100–2 gender and social geography 153–77 women's cycle racing 47–65 non-motorised transport (NMT) terminology 124 'non-places' 25–45 Norberg-Schulz, C. 30 Norcliffe, Glen 15–17, 99–102, 108–10, 153–77 North America 154–5, 157–61

see also Canada; United States of

America Northern Europe 3-4, 6 novelty factors 56, 58, 62-3 NRTE see National Road Traffic Estimates NTS see National Travel Survey objectivity 28, 136 obsolescence concept 118-19, 123 occupational identities 90 Oddy, Nicholas 11, 13, 14, 97-112 off-road cycling 73-4, 143-4 Olympic Games 51 'ordinary' bicycles see highwheel bicycles organisational identities 88-90, 95 Ortuzar, J.D. 75, 77-8 'other' cyclists 83-96, 193 Oudshoorn, N. 156 'outsider' messenger image 181-8, 190-3 'overload' of sensory experience 33, 35, 38, 41 Owen, Kelvin 187 ownership bicycles 73-4, 84, 91 cars 72-3, 85, 91, 121 Paris, France 157 Parkin, John 12, 67-82 parks 165-6, 168 Parsons, Tony 184-5 partnerships 5, 56-62 pathways 26-7 Patterson, Frank 109, 110 Pattison, Miss 55 Pederson bicycle 103 perception fear 136-7 places 29 risk 77-80 personal identity 83, 89 see also identity personal stereos 41 personalised transport 120-5, 127-9 see also automobility; bicycles; motorcycles Petty, Ross 59, 61 photography 110 physical factors 75-6 see also (the) body Pinch, Trevor 98, 156

places constructing place 27-8 cycling levels 2-4 fear of cycling 135, 142-7 gender 153-77 male places 157-61 sensory experiences 25-45 see also space planning methods 67, 68-71 see also transport planning/policies pleasure motivation 6 policies 84-5, 94-5, 146 see also transport planning/policies political identity 83 Pope, Albert A. 158 'positive-inside' representations 181-2, 186-7, 193 'positive-outside' representations 181, 182-3, 192 post-development studies 119 post-modernity 4 Pow. C.P. 30 The practice of everyday life (de Certeau) 33 Pratt, Charles 158-9 primary sources 48 prizes for racing 47, 54, 58, 61 production of cycles 3-4 see also manufacturers professional identities 88-90 professional sports 47-65, 161 'progress' myth 120 promotion of cycling 7, 12-13 fear effects 15, 133-4, 136 quantitative analyses 72-3, 74, 80 public life 161-3, 168-72 purpose of journeys 69, 72, 73-4, 84-5 qualitative analyses 12, 79 quantitative analyses 12, 67-82

racing 35, 47–65, 160 Raleigh 104, 106 Rational Dress Association 53–4 reckless cyclists *see* scorchers recreational cycling 49, 59, 73–4, 160–1 recumbent cycles 114, 116, 122–3, 127 representations of cycling 15–17, 134, 145–8, 179–95 research

202

futures of cycling 17-18 qualitative/quantitative 12 transport identities 87-8 responsibility bike messengers 184-5 'other' cyclists 92-3, 95 road safety 138-9 retailer investment 58-9, 61 revealed preference data 70-1 Richards, Thomas 62 risk compensation 140 fear of cycling 135-7, 141 perceptions 77-80 women's cycle racing 52, 53-4 Ritchie, A. 172 Ritchie, Josiah 47, 52, 54, 56, 61 Ritzer, G. 120 road racing 52 road rules, clubs 159-60 road safety 136, 138-9 road transport monitoring 68-9 see also automobility; transport... roadster bicycles 107-8 Rodaway, P. 28-9, 37 rolling resistance 75, 78-9 Rosen, Paul 1-24, 83-96, 114 roundabouts 31, 33, 37-9 route characteristics 70, 78-9 route choice models 71 route finding 26-9 Ryley, Tim 12, 67–82 Sachs, W. 119 safety bicycles 115-16 anti-domestic cycling 163-4 emergence 10-11 gender 153, 156, 157 twentieth-century history 98-9, 103-4 women's cycle racing 50 safety factors fear of cycling 136, 138-9, 141-5 gender 89-90 'other' cyclists 92-3 route design 70 women's cycle racing 53 see also risk salaries of racers 47, 54, 61 Sale, Jonathon 182

scapegoating 146, 183 scorchers 158, 161, 163-4 SCOT see social construction of technology seat-belts 136 second-hand bicycles 105-7 secondary sources 48 segmentation of markets 61 segregation principle 26, 116 self-identity 83, 92-5, 189-90, 191-2 'self-made manhood' 155 sensory experiences 25-45 Simmel, Georg 145, 191 Simpson, Clare S. 11, 47-65 single speed bikes 35, 38 skills of bike messengers 39 Skinner, David 12-13, 83-96 small-wheeled bicycles 122 social construction of technology (SCOT) 98 social constructionist approaches 98, 113 social dimensions of technology 115 social geography 153-77 see also geographical perspectives social location 83-4, 89-90, 94 social relations 135 sociality concept 25, 26, 27, 42 socio-economic classification 74-5 sociology emergence 1 space cycling levels 2-4 domestic cycling 165-6, 168-72 fear of cycling 135, 142-7 gender 153-77 male spaces 157-61 sensory experiences 25-45 spectator sports 50, 51, 56 see also audiences; sports speed 37, 126-7, 163-4 Spinney, Justin 10, 25-45 sports 10-11, 47-65, 116, 122, 161 standardised bicycle form 106-7 Stanley Shows 157 Star Cycle Company 103 stated preference data 70-1, 75, 77-8 status 7, 103, 121 stereotypes 146, 181-8 stigmatisation of cyclists 145-6 stops and starts 75, 78 'strangeness' of cyclists 135, 145-7

students 74 sub-cultures 181-3, 192-3 supply factors 54-6, 62 sustainability 4-5, 7-8, 18, 127-9 Sustrans 143, 144 symposia 8, 9 tandems 157, 170 techno-futurists 123-4 technologies bike messengers 39, 41 the body 29, 38 change 122-3 gender 89-90 historical perspectives 13-14, 98 linear histories 98 masculinity 156-7 modelling transport 113-31 places 35, 41 reconceptualising 120-5 see also information and communication technologies temperance movement 162-3, 167-8 Thorogood, M. 75 time 3-5, 135 time series analysis 69, 79 topography 69 see also hills Toronto, Canada 163-4, 169-72 'tourist' gaze 110 towns 2-4 see also cities track racing 51-2 see also cycle racing traffic conditions 77-8 see also automobility training cycle racers 54-5 transitory spaces 27-8 Transport Alternatives organisation 183, 190 transport identities 83-96 transport planning/policies 67, 146 see also planning methods; policies transport studies 42, 67, 68-70 transport technologies see technologies tricycles 116, 157 Tuan, Y. 28-9 twentieth-century history 97-112 tyres 79

ubiquity of cycle design 103, 106 UCI see Union Cvcliste Internationale UK see United Kingdom underpasses 31-3 uniforms 158, 160 see also dress code unilinearity concept 120 Union Cycliste Internationale (UCI) 50-1, 116.122-3 United Kingdom (UK) 2-4, 7 bike messengers 179-95 Cycle-Friendly Employers' scheme 87-8, 93-4 domestic cycling 165-6 fear of cycling 15, 133-52 gender 6, 158-9 male cycle clubs 158-9 promotion of cycling 13 quantitative analyses 67-82 sensory experiences 30-45 sports 10-11 twentieth-century history 97-112 women's cycle racing 48-9, 53-4 United States of America (USA) 4, 48-9, 133. 179-80. 183 see also North America universal sensory experiences 31 urban cycling 185 see also cities Urry, John 17, 28, 110 USA see United States of America use hierarchy 121 utility cycling 84-5 see also work journeys

Vail, A. 191 values in workplaces 88–90 Van De Walle, Frederick 13–15, 113–31 Vauxhall Cross, London 37–9 velocars 117 velocipedes 97–8, 100, 115 velodromes 50, 52, 58–9, 62 velomobiles 114, 116–17, 124–9 velomobility definition 2 futures of 113 historical perspectives 14 time 5 Victorian era 153–77

Index

see also nineteenth-century visibility 134–5 visual experiences 27–8, 33–5, 41 vocabulary for sensory experiences 30 Von Drais, Karl 115

Wales see United Kingdom Walvin, James 10 Wandsworth Bridge, London 31-3 Warbuton, James 'Choppy' 55 Ward, Maria 162, 163-4, 168-9, 172 Ward, Mrs (racing cyclist) 55-6 Wardman, M. 78 WCTU see Women's Christian Temperance Union Weatherby, W.J. 182 Weaver, J. and J.T. 59 Wells, H.G. 105 Wentworth, R. 37 Wheel within a Wheel (Willard) 161-3, 165 - 8The Wheels of Chance (Wells) 105

Willard, Frances 157, 161-3, 165-8, 169-72 wind speed 75-6 women 15-16 bike messengers 188 cycling levels 6 flaneur concept 102 nineteenth-century 153-77 professional cycle racing 47-65 sports 11 technology relationship 89-90, 120 Women's Christian Temperance Union (WCTU) 162-3, 167-8 work journeys 69, 72, 74, 84 see also commuting working classes 101-2, 105, 107-8, 155 see also class 'Workplace Cycling Cultures' project 87 workplace identities 88-90, 94-5

X frame bicycles 104-5