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Why culture matters for transport policy: the case of cycling in the UK

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Rachel Aldred and Katrina Jungnickel

Abstract

Policy seeks to support cycling as a form of sustainable and active travel, yet, cycling levels in the UK remain low and evidence about interventions mixed. Data from a qualitative sociological study is used here to explore the difference that cultural meanings make to cycling practices in four different English urban areas. Specifically, we discuss differences between places with established cycling cultures and those with newer cycling cultures. Drawing on concepts from practice theory we discuss the role that cultures of cycling play within the four places, and suggest how the meanings of cycling, including its association with other social identities, are connected to the materials and competences seen as necessary for cycling. Our research highlights the embedding of transport in local as well as national cultures, and the associated need for policy-makers to take culture seriously in considering how to shift transport practices.

Word Count: 9,067

Introduction

The 1990s saw the birth of 'New Realism' in UK transport policy (Goodwin et al 1991); with leading transport academics supporting its call to reduce travel demand and encourage mode shift away from the car (Banister 2005, 2008). Some aspects of New Realism have made their way into policy discourse; for example, during the past 16 years transport policy within the UK has sought to increase cycling. 'Transport 2010: a ten year plan' (DETR 2000) aimed to triple cycling trips within ten years; yet the numbers of cycling trips hardly changed during this period. This has led to debate about the causes of policy failure, informed by evidence reviews (Ogilvie et al 2004; Yang et al 2010; Pucher et al 2010). The results of these are mixed and conflicting, partly because of different views on 'what counts' as evidence.

This article responds to these debates by exploring the contribution of place-based cultures to cycling uptake, focusing on places within the UK where cycling levels are rising and/or high. Currently, there is little work on cycling and social identity that is comparative, or explores higher-cycling places within a low-cycling context. Thus, the importance of local cultural contexts in supporting (or, potentially, suppressing) cycling remains unexplored. We seek to establish that culture matters in shaping cycling practices, using specific examples to demonstrate how. We acknowledge that definitions of 'culture' are contested in both academic and public discourse; we explain below our use of the term and how we connect it to a practice theory approach, used recently within this journal (e.g. Watson 2012; Schwanen et al 2012).

The article begins by justifying and outlining the theoretical approach taken and siting the paper within the context of current social scientific work on cycling. Secondly, the data is introduced, including the research contexts and their salient features. Next, key findings are summarised and discussed; including differences between the cycling cultures we found in

different areas and why these exist. For example, we show that even among places with relatively high (for the UK) cycling levels, what is happening to those cycling levels matters for how cycling is understood in those areas. In particular, we focus on the impact of cycling levels being relatively stable, in decline, or increasing. This includes discussion of how cycling is seen as connected to class and to narratives around transport choice. We conclude by arguing that a focus on cycling culture is not opposed to a focus on infrastructure; rather, it enriches it by linking the material and the symbolic and by drawing attention to ways in which culture shapes the impact of policy interventions.

Cycling, Place and Culture

Interventions and Evidence

There are ongoing debates about the impact and effectiveness of cycling-related interventions. Within lower-cycling countries such as the UK, advocates speak of the issue in terms of the 'segregation debate' (Geffen 2012). 'Infrastructural' interventions (paradigmatically, but not solely, building separated cycle tracks along roads) are counterposed to promotional or educational campaigns and initiatives, such as providing adult cycle training. Among those favouring the latter, the argument is that such initiatives have a cultural impact in normalising cycling, and thus can potentially increase cycling levels at a much lower financial (and possibly political cost) than re-engineering the built environment. Hence in policy debates, 'culture' frequently appears as the antithesis to 'infrastructure'.

Among researchers, evidence reviews have generated mixed results. In a systematic review focused on modal shift to walking and cycling, Ogilvie et al (2004) found a lack of good evidence on the effectiveness of interventions. In 2010, Yang et al reviewed all effects of interventions to promote cycling. Again they found a lack of strong evidence, concluding 'it is unclear whether increases in cycling could be achieved at lower cost [compared to infrastructural improvements] by addressing attitudes and perceptions about cycling'. They comment that conversely, 'lack of supportive infrastructure might limit the willingness of people to take up cycling, particularly in areas without an established cycling culture.'

A different picture emerges in Pucher et al's (2010: s106) review of interventions to promote cycling: 'Many studies show positive associations between specific interventions and levels of bicycling'. Pucher et al draw upon a broader range of evidence including case studies of cities with substantial increases in cycling. Pucher et al comment that while their review provides evidence that public policy matters, this does not provide firm knowledge about direction of causality, so it is unclear whether infrastructural or policy changes led to increased cycling levels, or vice versa. They warn against hasty generalisation (2010: s121):

Research has found that non-cyclists who are surrounded by other cyclists may be more likely to have contemplated cycling and thus more responsive to policy interventions [...] Thus, the very same infrastructure provision, program, or policy might have different impacts on bicycling in different contexts.

Steinbach et al (2011: 1124) concur that 'the meaning of particular transport modes deriving from how they are understood [...] in particular times and places'. Van Goeverden and Godefrooij's (2011: 3) report on Dutch interventions demonstrates modest increases in bicycle use in already high-cycling contexts (although not generally mode shift). While agreeing with Pucher about the importance of context they posit a different direction for its impact on interventions:

In countries that start "from scratch" with low bicycle use and a poor bicycle network, interventions that promote cycling may have different (probably larger) impacts.

Both directions of relationship are plausible, raising questions about the impact of place on cycling levels and on the design, implementation, and success or failure of cycling interventions. These unanswered questions suggest that further work exploring the varying meanings of cycling (building on, and going beyond the distinction between 'low' and 'high' cycling contexts posited by both groups of authors) can provide useful knowledge in this important yet under-researched area. These meanings encompass, but are not limited to, the associations of cycling with different dimensions of social identity; for example, gender and class. The mobilities literature, with its strong qualitative focus on meaning, provides a starting point (Fincham 2006; Horton et al 2007; Spinney 2007, 2010). This article builds on that approach to develop a comparative cultural analysis that has so far been relatively little explored in relation to cycling.

Practice, Culture and Cycling

A starting point for us was Raymond Williams' (1988) classic definition of culture as a 'way of life'; everyday behaviour that often remains invisible because it is what people 'just do'. This fits well with the growing importance attached to 'habit' in transport behaviour, by comparison to conscious choices between travel modes (Gärling and Axhausen 2003). Culture here is distinct from subculture; subculture being used (after Hebdige, 1979) to refer to a distinct identity contrasted with, and often at odds with, the broader culture within which a person is located. Thus in the UK as a whole, we could see car culture as dominant, with lifestyles built around the assumption of car ownership and use (cultural normalisation) rather than car use being actively chosen. Transport subcultures might include, for example, specialist car owners (organised around their identification with a particular type of car), or, potentially, users of other modes where there is some collective self-identification with the mode. In some circumstances, this might include variously cycling, public transport use, or walking; in other circumstances it might not.

Our perspective on culture is linked a broader approach drawing on practice theory. The concept of 'culture' suggests more what is given to us (i.e. we are situated within a particular cultural context; for example, one in which most community members are expected to get the bus to work), while 'practice' highlights what we do (i.e. we get the bus and in the process fulfil the expectations of those around us, or we carry out alternative travel practices which require some response to community norms). Both views can be helpful. Swidler's (1986) exploration of culture and practice makes this point; cultures guide actions not by providing ultimate values, but by offering a toolkit of resources enabling (or blocking) particular practices. (For example, we may

have learned to enjoy the sociable activity of travelling on the bus with others.) While de-centring the individual, practice theory retains room for agency (Watson 2012) by focusing on activities rather than primarily on systems constraining choices.

This approach can help us explore what helps to stabilise cultures and what makes them change, by exploring how meanings and values are related to social institutions and technical infrastructures (Southerton et al 2004). For example, the widespread take-up of domestic fridges during the twentieth century helped produce a revolution in shopping practices, with knock-on implications for a variety of domains including travel practices (Shove et al 2012). Exploring change as well as stability is crucial to understanding transport practices, which are both strongly habitual and subject to rapid change (such as the near-annihilation of UK transport cycling during the two decades after World War Two). Shove and Walker (2010), for example, examine how the London Congestion Charge encouraged many individuals to change their behaviour in relatively small ways, leading to a broader shift in the practice of driving within London. We would link these shifts in practice to the cultural changes identified by Steinbach et al (2011) who describe driving as becoming less culturally normalised in the UK capital.

Normalisation of a practice does not mean closure; rather, it is a dynamic and unstable process necessitating the ongoing integration of materials, ideologies and skills. Assemblages comprising a particular practice can be carried over, in part or whole, for use within another practice. Watson (2012) argues that the bicycle laid the basis for the car, in developing a set of needs, desires, infrastructures and priorities that could, it turned out, be better met by motorised individual transport; at least in the early days of motoring. Focusing on the car, Shove et al (2012) explore the changing relationship of masculinity to both driving and motor vehicle maintenance, and how shifts in masculinity and in driving practices affected each other.

Practice theory conceptualises individuals as actively manipulating the elements that comprise practices, these being materials (or 'stuff'), competences (or 'skills'), and meanings (or 'images') (Shove et al 2012). In London, as suggested above, such transport-related resources may no longer support driving as easily as they once did, and this affects people's ability to participate in different transport practices. The toolkit of resources might be seen to comprise, for example, materials such as the car itself (car ownership in London is falling, so fewer potential drivers have private household car access), competences such as the ability to navigate routes and easily locate parking, and meanings such as the emotional enjoyment of driving or the belief that driving in London is the kind of thing that 'people like me' (or 'people I aspire to be like') do.

The meanings, competences and materials needed to participate in a practice will differ by context: if bicycles must share space with heavy, fast moving motor traffic, the level of skill required is likely to prove off-putting to many potential cyclists. Practice theory talks of the relocation of competences; as part of the normalisation of practices, competences often move from the individual into infrastructure or objects. For example, the growth of in-car GPS has meant that drivers and passengers no longer need sophisticated map-reading skills. If a practice becomes widespread, we might also expect meanings to shift: like competences, they might become less

closely tied to the individual. Hence, when everyone cycles, no one is 'a cyclist'; it is not who you are but simply what you do. Conversely, where cycling is marginalised (and cycling may require higher levels of competence, or less easily available materials), characteristics associated with the practice may be more likely to coalesce into an identity (i.e., an expression of a perceived group affiliation). Practice theory helps us to understand these connections by directing attention in this way to relationships between materials, meanings, and competences, which often remain stable, yet can trigger dramatic change on an individual or societal level.

Approach and methods

Despite substantial variation between cycling levels and their rates of change, much work on the cultural dimensions of cycling in the UK focuses only on low-cycling contexts and thus does not explore potentially important variation. In Cambridge (as in higher-cycling countries) equal proportions of men and women cycle to work. The impact of class also varies: a report by Steer Davies Gleave (2010) shows that across England and Wales, relatively affluent groups have a higher propensity to cycle to work, yet relatively impoverished Hull bucks this trend. However, the qualitative literature on cycling is generally limited to one context (in the case of Pooley et al 2011, all case study areas are low-cycling, and the focus is on commonalities rather than difference).

This paper complements that literature by exploring how meanings associated with cycling differ in two 'established' and two 'emerging' cycling cultures and the possibilities and limitations afforded therein. By 'meanings', we cover, for example, whether cycling is seen as for middle-class or working class people, how it is gendered, and whether it is seen as being predominantly for transport or for 'sport'. These meanings emerge from, and shape, cycling practices in the four areas. For example, we have variously found cycling narrated in terms of 'rational choice' or alternatively in terms of 'subculture'. These meanings have differing levels of congruence with a range of other social identities (including class and gender), which then shape the ways in which cycling can be practiced, creating limits to participation.

The paper draws primarily on interviews conducted as part of the ESRC Cycling Cultures project (www.cyclingcultures.org.uk). The project is a mixed-methods study of four urban areas in England where cycling rates are relatively high and/or rising. In the UK much research has understandably focused on cycling as marginal, studying minority cycling subcultures (e.g. couriers: Fincham 2006; Spinney 2011) or examining the *absence* of cycling in general or among specific groups (Pooley 2011). This research is different: it compares and contrasts places where cycling is *relatively* normalised, seeking to explore contexts which are different or where positive change is happening, and learn from these.

Interviewees fall into two groups: firstly people who cycle as part of their everyday lives, mostly involving regular 'utility' trips, and secondly 'stakeholders' identified as important within local cycling cultures. Most of the former were contacted via postcards either given to cyclists at junctions or left on bicycles at popular cycle parking locations. The latter included cycling officers, transport planners or road safety officers, advocates and managers of small businesses. Over 150

interviews were carried out, three-quarters with 'everyday cyclists' and one-quarter with 'stakeholders'. The research was approved by the University of East London Research Ethics Committee and informed consent was obtained in writing from participants.

'Everyday cyclists' interviews began with an open question¹; 'can you tell me about cycling in relation to your life'. Interviews then continued with questions related to the interviewee's response, for example, asking for more details about their recollections of cycling as children, or about current cycling to work. To ensure some comparability across interviews and between areas, we made sure we covered identified a list of areas of interest including whether participants' friends and family currently cycled, how they viewed themselves as a cyclist, whether they had experienced theft or crashes, and their opinions of local cycling environments. Such issues often however spontaneously emerged in discussions related to the initial question. Stakeholder interviews usually began with an enquiry about the interviewee's role in relation to cycling, with follow-up based on the response and pre-planned questions tailored to each interviewee. This was complemented by in-depth ethnographic research and observations: for example, observing who cycled, what they wore, and how they behaved in different contexts.

For this paper we utilised qualitative software package NVivo to review interviews for content related to (a) the level and type of cultural normalisation of cycling and (b) factors identified as blocking or supporting this. The aim in this was to explore differences (and commonalities) in the social construction of cycling and connect this to salient differences in competences, materials, and meanings; one example being differences in how cycling is seen as a classed practice, which relates to different socio-political contexts in the four places and how cycling is positioned within these. In giving some such examples below we are not intending to be exhaustive but to show how cycling practices are shaped in different local contexts; in different places they involve different configurations of meanings, competences and materials.

Below we present key findings split into different areas, before summarising broader implications of findings. Some brief discussion is needed to contextualise the data. While cycling levels in England remain low overall (3.1% in 2011, very similar to the 2001 figure), there is much local variation: seven English local authority areas had cycle to work rates topping 10% in 2011 and thirty-five between 5%-10%, while at the bottom of the table ten had rates of under 1%. There are places where cycling is *relatively* normalised; and places where cycling rates although lower have increased dramatically in recent years. This is in line with findings from other European countries: Fietsberaad (2009) stressing 'how much bicycle use varies [...] by town [...] even in non-cycling countries there are nevertheless some cities with respectable levels of bicycle use, for instance in Great Britain, the Czech Republic, Sweden and Italy.'

Table 1: Cycling to work and car ownership, four case study areas, 2011

¹ With the exception of several of the pilot interviews, which were more structured.

	Bristol	Cambridge	Hackney	Hull
% cycle to work, 2011 (and change compared to 2001)	8.1% (increase)	31.9% (slight increase)	15.4% (increase)	8.3% (decrease)
% households with no cars or vans, 2011	28.9	33.6	64.6	40.6
% households with one car or vans, 2011	45.1	46.6	30.6	42.3
% households with two cars or vans, 2011	20.7	16.2	4.1	14.2
% households with 3 or more cars or vans, 2011	5.2	3.6	0.7	2.9

Source: 2011 Census data

Our four case study areas are Bristol, Cambridge, Hackney, and Hull. They were chosen as four diverse urban areas with cycle to work rates at least double the UK national average, according to the 2001 Census (this is still the case in 2011, with rises in Bristol, Cambridge and Hackney compared to 2001 against a broadly flat national picture). We categorise Cambridge and Hull as ‘established’ and Hackney and Bristol as ‘emerging’ cycling cultures. Both Cambridge and Hull have compact and dense urban centres and are predominantly flat. An Inner London borough, Hackney is also dense and flat, and while there is relatively little employment in the borough, it is reasonably near Central London employment centres. Bristol is a large city, with suburbs, satellite towns and villages, in the hillier and wetter West side of England.

We sometimes encountered direct comparisons where participants had experienced cycling in more than one case study area. This participant had moved from Cambridge to Bristol, and vividly described the additional physical effort and technical support (materials and competences, in practice theory terms) needed:

[B]efore I left Cambridge one of my colleagues at my old job said be careful in Bristol I have heard people going down the hills and their brakes don’t work and they crash into the back of a car and I just thought ‘right’ (laughing) [...] in Cambridge no one’s brakes work and it doesn’t really matter... you know you always had one brake that works and it was just fine but in Bristol that was certainly very different but I have got very used to it. (BRN20)

While we were not aiming for statistical representativeness, the demographic balance of participants in the four areas was shaped by broader cycling patterns. In Hull, interviewees tended to be older than in other areas; in Hackney they tended to be younger. The age distributions did not surprise us: in our ethnographic fieldwork, we observed a higher proportion of older people cycling in Hull and Cambridge, but fewer in Hackney and, to a lesser extent, Bristol. In Cambridge and Hackney we had a relatively high proportion of female respondents; this was not surprising in

Cambridge where Census statistics show relative gender equality, but was perhaps less representative of Hackney, where, like other London boroughs, men are over-represented. Hackney’s official figures are less balanced but given our interviewee response and fieldwork observations, we think the gender balance is becoming somewhat more equal.

Stakeholder organisations also varied locally: in Bristol and Hackney we found a broader range of community, cultural, and business organisations related to cycling. This we linked to the more ‘subcultural’ nature and in Bristol to the broader existence of a professionalised volunteer culture. In Hull, most cycling organisations were more ‘traditional’ (often focused around sport or longer-distance touring); as were the bicycle shops, some run by families for generations. Bristol and Cambridge were recipients of ‘Cycling City’ funding between 2008 and 2011 and so we interviewed people involved in these programmes. The initials after quotes indicate the place (BR/CB/HA/HU), then type of interview (N for narrative/S for stakeholder) then a number to identify the interview. CP1-34 indicates pilot narrative interviews in Cambridge.

Findings

The findings are summarised in a table below, focusing on relevant key findings from our interview research: whether cycling is currently seen as associated with the specific place, the type of cycling culture (established vs. emerging), the perceived relationships of cycling to choice and to class, and what interviewees viewed as the (stereo)typical local bicycle and local cyclist. The use of ‘choice’ here is based on the discourses around choice found in the interview material. Interviewees identified two dimensions of choice related to cycling: firstly, ‘rational choice’ as used in traditional transport modelling (a trade-off between financial costs and values attached to different types of time), and secondly, a ‘subcultural choice’ made by people seen as having deliberately allied themselves with a transport-related identity, separate from the calculation of costs and benefits. Drawing on this distinction helps us to analyse how differences in cycling relate to other characteristics of cycling practices in the three areas.

It is argued that there is a key distinction between emerging and established cycling cultures, and further, there are important differences between the two established cycling cultures: Cambridge (where cycling is high and stable or increasing) and Hull (where cycling is declining). We can therefore identify three different clusters of cycling practices, depending upon the cultural meanings prevalent in each area, with implications for the potential for different interventions to contribute to shifting broader local transport practices and cultures.

Table 2: Summary of key findings, four case study areas, 2011

Case study area	Bristol	Cambridge	Hackney	Hull
Seen as a cycling place (by interviewees)?	Yes	Yes	Yes	No

Established or emerging cycling culture?	Emerging	Established	Emerging	Established
Cycling and choice	Cycling as subcultural choice	Cycling as rational, mainstream choice	Cycling as subcultural choice	Cycling as lack of choice (rational choice without alternatives)
How is transport cycling associated with class?	Cycling as middle class	Cycling as classless (or weakly associated with affluence)	Cycling as middle class	Cycling as working class
'Classic' local bicycle referred to in interviews	Expensive touring, commuter or mountain bicycle	Shabby shopper bicycle with basket	Trendy 'fixed wheel' bicycle	Cheap mountain bicycle
Key local cyclist stereotype(s) referred to in interviews	MAMIL (Middle aged man in Lycra)	Bicycling professor, local eccentric, student	Fashionable young professional or student	Low income cycle commuter

Established cycling cultures

Cambridge and Hull have traditions of cycling demonstrated in successive censuses but are otherwise very different; Cambridge being an affluent university city with a thriving 'knowledge economy' and Hull a working-class city with limited employment opportunities, having lost its traditional industries decades ago. There are substantial differences in car ownership (important both as an alternative form of transport and as an indirect indicator of income). For Cambridge interviewees the main perceived alternative to cycling is the car, while in Hull, it was sometimes public transport and sometimes the car.

Two key differences discussed below relate to discourses of class and choice. However, in both cities there was to an extent a denial of cycling as 'cultural' (meaning subcultural), instead constructing it as 'just something that people do here'. In different ways, the 'typical' or 'stereotypical' Cambridge and Hull cyclist embodied this normalisation, by often being seen as representing the place more broadly; while the typical Hull or Cambridge bicycles were seen to be relatively inexpensive and 'ordinary' – cycling was not perceived as requiring high levels of skills in

these places, nor large amounts of 'stuff'. However, this relative normalisation did not mean being 'a cyclist' was unproblematic (see Aldred 2013); more negative stereotyping and stigma linked to local and/or national narratives about cycling were also present.

In Cambridge, cycling was deeply embedded into other local practices and meanings and has remained so; while this has not happened in Hull. Cycling as an everyday 'natural' practice slipped out of mainstream local cultures even as cycling levels continued to remain high by national standards. Hence, we were often told that Hull 'doesn't have a cycling culture'. While in Cambridge people might deny cycling was cultural, this expressed a belief that cycling was popular across social boundaries: but in Hull, it meant that cycling had slipped out of view (neither expected nor contested). Yet from Hull we learnt that well organised individuals can effectively mobilise policy and organisational change, even in a relatively unfavourable context. The following two sections explore meanings associated with cycling in Cambridge and Hull, specifically focusing upon the articulation of 'choice' to highlight a key difference between cycling practices in these two relatively high-cycling contexts.

Cambridge

In Cambridge, cycling was to a certain extent taken for granted as tradition. This was linked to defining it as about 'utility' – cycling is described as being initially rational and purposive (sometimes then described as *generating* a culture). One respondent challenged our use of 'culture', saying 'I didn't think culture came into this, I thought it was just a matter of utility' (CP16). This was associated with the exercise of 'choice': cyclists were seen as actively and rationally choosing to cycle, some participants contrasting this to lower-cycling places they knew:

In California erm... certainly it was, "Oh my God, they're on a bicycle! What are they doing that for, can't they afford a car?" Where here there is the feeling that, "Well, he's on a bicycle because he's made a choice to do that." (CS6; local authority officer)

Participants saw Cambridge as highly distinctive within the UK because of its high levels of cycling; the high levels of cycling then being seen as part of what makes Cambridge special. Experiencing the 'Cambridge effect' through living in the city (cycling or not) could encourage recalcitrant friends or relatives to accept cycling (even if not cycling themselves):

[My parents] always thought cycling was a bit weird. [...] I think since moving to Cambridge as they've done my, my dad has got, has understood that actually cyclists do, well, you know, do save congestion, you know, and that actually it's a good, a healthy way of going around. (CP11)

Part of this effect operated through social influence and pressure exerted on peers. Many participants thought that if owning a car was a (regrettable) necessity, using it for short trips was not, and were not afraid to indicate as much:

Very occasionally [the car is used] for, you know, picking up other people's children, but even there, we try and cycle (CN9)

However, peer influence only formed a relatively small part of the cultural normalisation of cycling. It sat within a context where cycling was seen as fitting in both with other areas of life (e.g. shopping, going to work) and with Cambridge as a place. Many interviewees expressed how a broader set of emotional responses and values supported cycling, in which cycling 'felt right' and driving did not. Many participants expressed their sense that restricting one's car use (or, for a minority, not having a car) and cycling for some journeys 'felt right' as well as being rational or logical. The meanings of cycling thus draw on emotions and values, as well as (for example) social identities. Cycling practices are reinforced and re-made through meanings that encourage practitioners not just to *think* in particular ways, but also to *feel* in particular ways:

I've always hated the thought of having to get into a car to go where I wanted to go. I live in Cambridge so it's very, very convenient for me. (CN3)

A representative of the local cycling campaign explained that the relative acceptance of cycling among at least a substantial minority gave Cambridge campaigners an inbuilt advantage over campaigners in other areas (although money remains a big issue):

[We] don't have to argue about the principle of cycling [...] we can get straight onto the actual technical debate and where's the money. (CS5)

Cambridge's relatively high tolerance of cycling extends to more unusual types of cycle, as explained by a retired woman who has difficulty walking and so rides a tricycle:

I thought, "Well, Cambridge erm... anything goes in Cambridge" [...] I have seen all sorts of weird cycles. (CN7)

This interviewee linked tolerance of 'weird cycles' to a broader cultural identity she attached to Cambridge, describing it as a place where 'eccentricity is the norm'. Cambridge's perceived local distinctiveness extends to some workplace cultures that normalise and reinforce cycling, with participants describing how colleagues (and, importantly, managers) encouraged cycling or how their own behaviour had influenced others. A council employee spoke, for example, of how people arriving at meetings by car would be seen as odd, and looked down upon. But even here, cycling can be a threat to some work identities:

On private jobs some people, I can see them kind of giving me the once over think, "Oh he can't be very professional and/or successful", you know. (CP24)

This respondent was a builder. The data indicates how cycling is locally articulated with class: while for many Cambridge residents, cycling might be associated with 'choice', the same is not necessarily true for a tradesperson. The interviewee was acutely aware of how private clients *feel* on seeing his bicycle, countering this potential business threat by stressing his 'green' credentials. Class also matters in Cambridge through the spatialisation of cycling: it is concentrated in the city itself and prominent for short trips, as recognised in the Cycling City project which sought to spread Cambridge's 'cycling culture' into outlying areas and new developments. We spoke to participants who worked in Cambridge, but unable to afford to live there, moved to

outlying villages or towns where they felt their cycling was less well supported. These places have substantially lower cycling rates than Cambridge City, with (a) traditionally poor infrastructural connections, (b) longer commuting distances and (c) a less supportive cultural context.

Hull

By contrast to Cambridge, cycling in Hull was constructed as being about *lack* of choice. These twin discourses tell us more about 'culture' in lay discourse; it tends to be used to suggest a deliberate lifestyle choice rather than the less conscious underpinnings of everyday practices. Even many of Hull's cyclists did not recognise the city as having a cycling culture. It was just something they did, rather than something they felt part of. While in Cambridge 'utility cycling' was defined as the outcome of a rational choice between modes, in Hull it was often defined in *opposition* to choice (and in opposition to leisure cycling, perceived as middle class):

There's a cycling community where people will go out for leisure but a lot of the people that you see they're on main roads and they're just wanting to get from one place to another (HUN7).

Overwhelmingly in Hull it's kind of erm working class people that do utilitarian cycling really. (HUS1)

Constructing cycling in this way can implicitly devalue working-class cultures, as cycling is then seen as not a 'real choice' but done because one has no other option. Yet dichotomies of leisure versus utility cycling and (middle-class) culture versus (working-class) necessity were also subtly undermined by participants, who would speak of how motivations for cycling (and comparisons with other modes) changed over time, variously incorporating pleasure, necessity, health, convenience, environmental motivations and personal preference.

History was important, particularly Hull's tradition of adult cycling to work, with the classic 'Hull cyclist' seen as, like the town, struggling and low income. Hull's tradition of cycling to work was linked to specific neighbourhoods and workplaces; and often to a sense of loss pervading both the city and cycling in it:

Where I live [...] everybody has more than one car, everybody has a car, the wife has a car, the kids grow up and get their cars and nobody seems to, to cycle and in them days it was different. Everybody had bikes and they worked on the fish docks or they worked at the erm Smith and Nephews that was just up Hessle Road and such. So everybody went to work on a push bike, that, the Hessle Road in the morning rush hour was just a mass of push bikes. (HUN12)

Interviewees talked of now being at odds with co-workers whose interpretation of transport experiences was very different. The data shows how 'convenience' is shaped by cultural norms, and that cycling cannot be 'convenient' if it seems utterly removed from everyday practices and beliefs:

I'm the only one in the office that [cycles to work]. And people just look at me and say how can you be bothered to get changed. How can you be bothered to do this every day... (laughs). (HUN22)

Many interviewees came from manufacturing or fishing families but now worked in education or community settings. Through some of their practices, Hull's cycling tradition was consciously transmitted to newer generations, with examples given including the use of cycling magazines as teaching material in class. Others pressed for facilities or services at workplaces, despite a resistance rooted in the cultural denormalisation of cycling:

[W]hen I came here erm... they had mileage for cars if you use it for business use and I said, "Oh have you got a mileage for business use on bikes?" and they burst all out laughing and I went.... "Well I think we should". And we've got one now. But they all thought that was hilarious at first. (HUN16)

In Cambridge, class was de-emphasised but in Hull it was always present and used to explain many of the city's problems. From a former member of the (now defunct) cycling campaign, particularly active (and in our view, quite successful, achieving some significant improvements to cycling environments) during the mid 1990s:

I think Hull's quite a difficult place to get people involved with, there's not a big sort of middle class base in Hull. (HUS1)

This interviewee (who self-identified as middle class) went on to acknowledge, slightly surprised, that 'in Planning where I worked most people in the office actually cycled to work'. Later we learnt more about how such organisational cultures had supported cycling, with key factors including committed individuals, environmental and health campaigns, and the effects of local government re-organisation. Cycling had been institutionalised to an extent through appointments and some integration of cycling provision into local planning policy.

One of Hull's problems has been the association of a negatively articulated local identity with the perception of cycling as something poor people do. While seen as culturally unremarkable (a sign of relative normalisation), cycling has therefore been closely associated with local problems. Yet overall the picture is mixed. While in Cambridge the local cultural context has been relatively favourable to cycling, Hull's experience during the 1990s suggests organisational cultures (workplace advocates, pressure groups, voluntary organisations, service providers, local authority networks) can help support cycling despite other unfavourable contexts. Despite the long-term denormalisation of cycling in Hull and the more recent waning of campaigns and funding, some of the cultural shift within local organisations remained intact, although cycling to work did decline noticeably between 2001 and 2011 (after the heyday of the cycle campaign).

Newer cycling cultures

In Bristol and Hackney, cycling has risen recently: in both places, commuter cycling rates were lower than the national average in 1971, but are now higher. Both have pockets of affluence

alongside deprivation. Bristol's car ownership figures are similar to the English average, while Hackney's are low even by London standards, and falling. Bristol and Hackney lack long histories of cycling. Participants do however appeal to a perceived 'alternative' character associated with their local area, seen as enabling cycling. Despite Bristol's relatively high car ownership and use, it has a history of environmental campaigns, while Hackney has long been seen as having its own distinctive and subcultural character ('that rose-red empire' for local writer Iain Sinclair).

Participants associated cycling with local 'alternative' cultures including arts, small business, and community organisations. There seemed to be a greater perceived affinity between arts or community-based activities in those places where cycling is still struggling to embed itself within the local mainstream. This varies depending on local context: so in Bristol, arts-based organisations are particularly visible, while in Hackney cycle cafes are seen as representing the borough's 'cultural architecture' for cycling (Horton 2006). In both places, cycling was perceived as needing high levels of skills and more 'stuff', linked to cycling's relative marginalisation and the perception of it as a relatively specialised and niche practice.

While 'utility cycling' was seen as 'just happening' in Cambridge and Hull, in Bristol and Hackney participants (both cyclists and many stakeholders) aspired to utility cycling, but struggled to define it in contexts where cycling still remained relatively uncommon. Below this is discussed mainly with reference to Bristol (for reasons of space) but the debates also existed in Hackney. Participants were aware that defining cycling as 'functional' brought with it some sense of legitimacy in making it a bona fide 'transport mode' (Aldred and Jungnickel 2012). This is somewhat in tension with the subcultural character of cycling in Bristol and Hackney, a contradiction of which participants were often acutely aware. 'Utility cycling' itself can become a cultural strategy, linked to promoting particular styles of dress, types of bicycle, styles of travelling, etc.

Bristol

Bristol has a strong tradition of leisure and sports cycling, with mountain bike trails in the local area. However, this was seen as problematic in being the 'wrong kind' of cycling, potentially by the wrong people. Instead, Bristol advocates primarily sought to promote 'utility cycling', defined as separate from 'leisure cycling' (as in Hull, although differently so):

[T]his wasn't about sports cycling, this wasn't about lycra and clubs and something you did after work, a leisure activity. Really at heart what it was about was about utility cycling (BRS6)

However, identifying 'utility cyclists' is surprisingly difficult, particularly as existing commuter cyclists seemed more likely to wear Lycra and helmets than in the other areas (partly perhaps due to weather and topography, and partly to lower levels of cycling and thus greater perception of cycling as a minority activity). Stakeholders saw the pressure to wear 'cycle gear' as off-putting:

[A] lot of specialist equipment which, maybe bike shops make a big margin on, is not the best way to encourage people to cycle. (BRS8)

Among narrative interviewees, cycling and style were interesting and problematic topics. We asked one participant, a triathlete, whether other triathletes cycled for utility purposes:

[T]hey probably think I'm a bit odd for cycling to work in a pair of jeans. [...] I think they do utility cycle but in full kit on a nice bike and probably with a rucksack. A different kind of utility cycling but yeah, they do. (BRN3)

This statement expresses tensions over 'what counts' culturally as utility cycling, where destination, motivation, experience and style may convey conflicting signals. Female participants, particularly visible given Bristol's cycling imbalance, seemed particularly aware of these. Many had seen cycling images on the web. 'Cycle chic' websites seek to portray cycling as an 'everyday activity' not requiring specialist clothing; often showing attractive young women with feminine clothing while more traditional images of 'sporty cycling' are dominated by muscled male bodies. Yet while 'chic' images have a higher representation of women, they can be experienced as another form of mandated 'dressing up', as here:

Why can't I just look how I want to look? Do I have to dress up on the bikes particularly? On the other hand, I don't want to have to dress, I just want to wear what I want to wear and that not to be weird. (BRN13)

This participant then went on to describe a form of 'dress policing', when her skirt became caught in her bicycle, and another cyclist who stopped to help then berating her for wearing unsuitable clothing. The anxieties related to dress in Bristol (and to a lesser extent in Hackney) express tensions surrounding the meanings of cycling in emergent cycling cultures. Practitioners attempt to use materials (e.g. fashionable dress) to counteract negative images associated with cycling; however, this can then produce further problems, for example triggering negative assumptions about skill. In the Cambridge context where cycling has a higher level of cultural normalisation, dress has ceased to become such a marker for (in)competence; yet, where cycling identities are more marginal, clothing comes to express both cycling identity and competence in often contradictory and problematic ways.

In Bristol, as elsewhere, interviewees cited more positive social pressures, including buying or lending accessories and bicycles, or showing colleagues and friends cycle routes. Bristol's Cycling City team had identified the workplace as a key locus for behaviour change and this seemed to be borne out here. Some employers were described as approving of cycling and/or providing practical support, including formal green travel policies, bike sheds, showers, and pool bikes. In a low-cycling context, but where interest in cycling is increasing, the influence of the workplace may be particularly important in generating a normalised cycling identity in tune with a participant's other social identities and networks. The corollary is the potential for workplaces to have a negative impact and discourage cycling: one participant who worked for the local authority

itself described how colleagues ‘just couldn’t get their heads into why you would want to cycle [...] it’s completely outside their everyday experience.’ (BRN8)

Hackney

In Hackney as in Bristol, subcultural associations of cycling were prominent and to an extent contested. Cycling in Hackney has become associated with local arts and media-led gentrification; partly for material reasons (e.g. many young professionals do not have children) and partly for more symbolic/ideological reasons (e.g. people associating their occupation with pro-environmental behaviours). Hackney is ethnically diverse and ‘race’ was intertwined with class in some narratives; below the participant reflects ruefully on how the bicycle’s symbolic significance expresses his identity:

Much as I might try and deny it, I’m middle class I, you know, I’m a white middle class person living in Hackney. I ride a bicycle [...] I’m one of the only white people on my street (HAN10).

This association with relatively privileged group identities (specifically, gentrifying recent incomers) was made by other interviewees. Participants linked the subcultural associations of cycling in Hackney with other material and symbolic factors, such as the types of housing prevalent in the area (apartment blocks and Victorian conversions):

Investing in a bike and having somewhere to store a bike actually is a reflection of prosperity in a way. (HAN3)

If being able to buy and store a bicycle represented some level of privilege, it was also associated with counter-cultural identities and projects, as in Bristol where local artists sought to use cycling to spearhead broader cultural and political change. In Hackney, the borough’s growing number of bicycle cafes (incorporating bicycle repair shops, and perhaps more importantly, just providing bicycle-friendly places to meet) were cited as a particular encouragement to cycle, creating the impression that cycling is an accepted part of the local culture.

In Hackney, one interviewee vividly characterised the typical ‘Hackney cyclist’ as a ‘crazy character’:

There are some really crazy characters. There’s one guy that I’ve seen cycling around in Dalston who makes his own bikes and he’s got this ridiculous one which is two frames on top of each other. (HAN19)

While participants might talk of Hackney’s ‘cycling freaks’, they also said that cycling in Hackney could allow people not to feel like a ‘freak’ simply because they cycled. However, this does not apply to everyone within an area marked by sharp inequalities. For example, one Turkish Hackney woman told us that compatriots assumed she was not Turkish if she was seen cycling. As in other areas, practices of cycling can exclude as well as include, with exclusionary processes operating through the distribution of meanings, competences, and materials. Some types of cycling are more visible and valued than others; young, professional cyclists riding to work can be

seen as good productive citizens making an environmentally friendly choice (Aldred 2010), while cycling by less privileged groups is less well counted and even seen as problematic (for example, teenagers cycling around estates – or in policing parlance, ‘loitering’).

While cycling rates remain low among Hackney’s schoolchildren, educational establishments figured prominently in the data. Two local schools use part of their budget to pay for a sustainable travel co-ordinator involving parents and carers in cycling promotion, while others have installed cycle parking. As with examples of health workers given in Bristol, schools employees may be able to influence several different networks of people (parents and schoolchildren as well as colleagues and neighbours), potentially creating chains of take-up where other conditions are favourable.

People in Hackney talked, as elsewhere, about everyday things they did to help others to cycle, perhaps particularly necessary when cycling is culturally ‘new’:

[E]verybody needs a couple of saints to really send them on their way, to get you started, to be really patient and say, look, no, it’s... To not say it’s you, you’re doing it wrong, to say no it’s okay, I’ll make it easier for you. And also to just start you off... (HAN7)

As in the example of the teacher in Hull, this ‘saint’ role might not be needed or might happen less visibly where cycling remains a taken-for-granted part of local and national cultures, but stands out where this is not the case. In some cases cycle trainers played this role, while more often people described informal support from friends. This even extended to perceived support from strangers: cycling in the UK can be intimidating, and people spoke of how seeing other cyclists could increase their feeling of safety in the face of sometimes hostile environments:

I always feel much more safer when I am stopping at a junction and there are other cyclists and there is a pack of you (HAN14).

One downside of constructing a protective group identity, as with other social identities, is its association with the drawing of boundaries against ‘outsiders’ and the castigation of ‘bad’ group members, as discussed in Aldred (2013). The potential for ‘subculture’ to block the development of more normalised ‘culture’ has also been widely discussed within emerging cycling communities, and is further explored below.

Discussion: Cycling Meanings and Cycling Practices

As Shove (2012: 368) writes, ‘exactly what cycling represents depends, at any one moment, on the cohorts of cyclists who keep the practice alive, and on their relation to non-cyclists in terms of whom the meaning of the practice is also defined’. There are substantial national differences in the meanings of cycling: Pelzer (2010) discusses how cycling is linked to national Dutch identity, providing an important resource for many Dutch people in supporting their cycling practices. By contrast, in the UK cycling is not linked to national identity, meaning that ‘place’ must be drawn upon differently in thinking about oneself as someone who cycles. In all areas, people tried to offset Britain’s national image as a non-cycling country by appealing to

specific local cultures; this stress on the local also implicitly contests broader perceptions of 'homogenisation' associated with globalisation and (post)modernity. In constructing cycling as a 'normal' practice, people drew on symbolic resources around local identity, normalising it by virtue of their locality's perceived difference from the national norm in other respects.

Distinctiveness was often narrated as related to a perceived geographical isolation within the UK: Hull was described as 'at the end of the line' (on the coast and off the rail mainline) and Hackney's public transport links were seen as poor (for London). However, a locale seen as (geographically or symbolically) isolated within the UK could still be linked to other local and national contexts, particularly high-cycling European countries and cities. Frequently interviewees mentioned these other contexts, often as positive comparisons to their own city. Some drew on virtual links (such as bike blogs from across the world) while others drew on transport links (such as the Hull-Rotterdam ferry) or family links. The local here connects to specific other places, rather than a higher-level 'global' or 'national'. Connections beyond the local and national were made by interviewees in both places. This linkage of cities and countries underlines the relationality and constant re-making of place, and its connection to new politics of cycling (Aldred 2013a).

Our approach has indicated the importance of cultural specificity in shaping cycling practices, within the areas chosen. We have shown that it does make a difference whether places are 'emerging' or 'established' cycling cultures; established cultures have 'normalised' cycling to the extent that it can become culturally invisible (which can itself pose challenges for cycling interventions), while possessing substantial resources of competence through which, for example, cycling knowledge is passed around. Such resources of competence have helped cycling to survive in a country where mass motorisation, allied to a lack of good cycling infrastructure, has made cycling a daunting prospect for many. In emerging cycling cultures, attaining the 'meanings', 'competences' and 'materials' necessary for cycling demand even more work from practitioners; cultural activity and associated exclusions being more visible than in established cycling cultures.

In Cambridge and Hull cycling is more 'everyday' or 'mundane' than 'cool' or 'exotic'; in Bristol and Hackney the reverse is true. This has implications for how cycling is viewed (by cyclists and by non-cyclists) and for understanding how localised meanings of cycling might affect interventions. In Bristol, diverse strategies have included using limited funds to enrol young professionals and students as informal cycling ambassadors; creating arts-led and community projects to leverage social benefits of cycling; and utilising peer pressure within workplaces to embed cycling cultures there. In designing the Cycling City programme, council officers focused on areas where it was believed that the subcultural connotations of cycling could best amplify the impacts of infrastructural (and other) interventions. However, such areas may be relatively privileged and so care needs to be taken to also develop interventions in lower-income areas, which might utilise different social networks.

Our research did find that in all areas informal community cycling advocacy was widespread, operating through existing social networks (e.g. workplaces). This raises questions about the role this advocacy plays, in relation to cycling as mass culture and as subculture. How

can cycling move from being the preserve of a few, a badge of identity, to being an activity in which the majority are able to participate? And do subcultural identities formed out of marginalisation themselves form barriers to mass uptake? Data from Bristol and Hackney demonstrate struggles over identity, expressed for example in concerns over clothing, which seem linked to subcultural boundaries. However, analysis of Cambridge and Hull data suggests that even where cycling escapes subculture it has not escaped stigma (Aldred 2013). Unlike in higher-cycling countries, cyclists in Cambridge still face widespread negative perceptions, expressed for example in the local press. Even where cycling has become relatively normalised in the UK, it is still marginalised. While subculture may yet prove a barrier, stigma seems more problematic; and both must be seen as rooted in cycling environments which reinforce the need for cyclists to develop protective skills and identities to maintain their practice.

So cultural interventions are not an alternative to improving cycling environments, but should be seen as complementary, with the potential to multiply or reduce the impacts of other interventions. Both our own ethnographic observations and our interview data suggested that substantial infrastructural improvements could and should be made in all four areas. The very problems advocates have had in achieving continuous and pleasant cycle networks in the UK highlight the importance of 'meanings' and 'culture'. UK cyclists experience 'Crap Cycle Lanes'² partly because of the meanings associated with cycling, importantly including a dual stigma (Aldred 2013) where cyclists are defined either as road warriors (who need little in the way of cycle provision) or as incompetents (who deserve little).

While this paper has focused on cycling practices in themselves, it is clear that for cycling practices to be sustained, they must be congruent with other related practices. This might include, for example, shopping, going to work, or taking children to school. Where cycling levels have risen recently in the UK, such as in London, commuting has seemed the easiest practice to shift towards cycling, while travel to school (for example) has remained relatively resistant. Why are some practices easier to shift than others? Some reasons relate to cycling environments (infrastructural and cultural): so, some people may be willing to cycle alone on roads they perceive to be risky, but unwilling to allow their children to do so. However, it is also important to explore characteristics of these other practices to maximise the potential for cycling take-up. Policies of school choice³, for example, may lengthen and complicate escort journeys, creating additional obstacles to shifting school trips to the bicycle.

To conclude, our paper has explored how the meanings of cycling (including its association with social identities such as class and gender, and its relationship to discourses around choice and

² The title of a popular book produced by the Warrington Cycle Campaign, derived from their website section entitled 'Facility of the Month'; <http://homepage.ntlworld.com/pete.meg/wcc/facility-of-the-month/index.htm>

³ In the UK, 'school choice' policies have meant that parents no longer send children to the nearest school, but select between a series of schools for each child (while schools themselves select children).

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subculture) vary in different local contexts. These meanings create additional resources and challenges for interventions that seek to make cycling practices grow and/or become more inclusive. Further work could seek explicitly to build on the question raised by Pucher et al and Van Goeverden and Godefrooij about relationships between interventions and contexts. Cycling practices at city or national level have a history and a future (de la Bruhèze 2000); they sit within a trajectory that could lead to expansion, to change, to disappearance, or to stagnation. What impact will interventions have at various stages of that trajectory?

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