Annual Cycling & Society Symposium 2015
Day 1, Monday 14th September - Manchester Town Hall (Banqueting Room)

09:30	**Registration open**
10:00	**Introductions & Welcome** Gabriele Schliwa, The University of Manchester & Graeme Sherriff, University of Salford Ian Graham, Manchester City Council | Cllr Chris Paul, Transport for Greater Manchester Committee
10:30	**Session A** - Infrastructure & Governance (Chair: Rachel Aldred)
10:30	Brian Deegan (Transport for London): The role of governance, planning and stakeholder engagement in the delivery of major cycling infrastructure in London
10:45	Chris Mason (Bristol City Council): Developing the Bristol Cycle Network
11:00	Simon Ho (Transport for Greater Manchester): The Internet of Things and the Electric Bike: innovation opportunities for increasing bike ridership and cutting congestion
11:15	**Discussion**
11:30	**Break**
11:45	**Session B** - Cycling from 8 to 80 (Chair: Brian Deegan)
11:45	Rachel Aldred & Bridget Elliott (University of Westminster): Inviting Infrastructure: do preferences differ by age and gender?
12:00	Wilbert den Hoed (Newcastle University): Understanding cycling over the life course: a comparison between suburban residential neighbourhoods in Newcastle upon Tyne and Rotterdam
12:15	Oskar Funk (Roskilde University): Set the children free - on active transportation in children's school mobility
12:30	Carl Mann and Justin Spinney (Cardiff University): Cycle BOOM
12:45	**Discussion**
13:00	**Lunch**
14:00	**Session C** – Conflicting notions of cycling (Chair: Robin Lovelace)
14:00	Lucas Brailsford (Lucas Brailsford Design, Amsterdam): Cycling in the city, traffic law breaking, lawless cycling society
14:15	Cosmin Popan (Lancaster University): The sensescapes of cycling
14:30	Dag Balkmar (Örebro University): Violent traffic: men, masculinities and road conflicts in 'cycling friendly' Sweden
14:45	**Discussion**
15:00	**Guest presentation** by Pete Abel, Love Your Bike, Greater Manchester
15:15	**Break**
15:30	**Session D** - Cycling Uptake (Chair: Katja Leyendecker)
15:30	James Woodcock (CEDAR, University of Cambridge): Public health overview
15:45	Paul Wilson (University of Salford): The development of cycle commuting centres from a social practice perspective
16:00	Raymond Pritchard (Norwegian University of Science and Technology): Bicycle route choice data – an overview of methodological approaches.
16:15	Robin Lovelace (Leeds University): The National Propensity to Cycle Tool: building an on-line interactive tool to prioritise where to investment in walking and cycling
16:30	**Discussion**
16:45	**Concluding remarks and discussion (Chair: Gabi Schliwa)**
17:15	Optional Workshop: "The National Propensity to Cycle Tool" Robin Lovelace (Leeds University) & James Woodcock (CEDAR, University of Cambridge)
19:30	**Dinner (Zouk, Manchester – booking required)**

Cycling & Society Symposium 2015
Day 2, Tuesday 15th September – University of Salford | MediaCityUK (Room 3.08)

09:30	**Arrival**
10:00	**Introductions & Welcome** Graeme Sherriff, University of Salford & Gabriele Schliwa, The University of Manchester Rev Andy Salmond, Chair of Salford Cycle Forum
10:15	**Guest presentation** by Steve Connor, Creative Concern
10:30	**Session E** – Why don't more people cycle? (Chair: Steve Connor)
10:30	Andy Binder, Giles Perkins and David Wildman (Mouchel Ltd.): "Too wet, too windy, too dangerous, too far, too hilly, too hard…"What are the real barriers to cycling in the UK?
10:40	Tor Brørs, Robert Næss & Jøran Solli (Norwegian University of Science and Technology): Flattening out Norway - a study of electric bicycle users
10:55	Magda Cepeda (Leeds University): Perception of social class and status attached to cyclists acting as barrier for cycling
11:05	James O'Hare (Newcastle University): Using techniques from market research to help us understand the reasons people do or don't cycle
11:15	Discussion
11:30	Meredith Glaser, Sophie Schuff, Marco te Brömmelstroet & Bianca Hermansen (Copenhagenize) **Workshop**: Learning about the cycling city is like riding a bike: it must be experienced
12:00	**Break**
12:15	**Session F** - Cycling Economics (Chair: Paul Wilson)
12:15	George Weeks (Transport for London): Cycling and business case appraisal: innovations and implications
12:30	Richard Weston (University of Central Lancashire): Modelling demand and economic impact on cycle trails: a case study of three greenways in the Peak District National Park
12:45	Chris White (University of Chester): The conundrum of public life: delivering a cycling demonstration towns project in the North West of England.
12:55	**Discussion**
13:10	**Lunch**
14:00	**Session G** – Cycling Practice (Chair: Graeme Sherriff)
14:00	Katja Leyendecker (Northumbria University): Public perceptions of cycle space - method and approach
14:10	Mikkel de Vries Bækgaard & Andreas Hansborg Olsen, co-author Marco te Brömmelstroet (Aalborg University Copenhagen): Understanding cycling as an embodied practice
14:20	Tony Rees (Teesside University): Transformative technologies and social change – a cycling sub cultural case study
14:30	Viktoria Wesslowski (Facilitating Sustainable Practices, Hamburg): Facilitating a contested practice: building and growing urban transport cycling in Santiago de Chile
14:45	**Discussion**
15:00	**Closing discussion (Chair: Graeme Sherriff)**
15:15	**Symposium End**
15:30	**Cycling & Society Research Group - Annual meeting (Room 3.08)**
16:30	End

Session A - Infrastructure & Governance

The role of governance, planning and stakeholder engagement in the delivery of major cycling infrastructure in London
Brian Deegan, Principal Technical Specialist, Transport for London

The aim of the paper is to show the impact of governance, planning process and stakeholder engagement in the delivery of the £100M London Cycle Network Plus (LCN+) project from an experiential perspective. The author worked in the LCN+ project management team from 2002 to 2010 and employs a participant observation methodology in order to trace the impact of key decisions and approaches and their effect on successful delivery. In particular the paper focusses on the role of stakeholders and other human factors that influence project decision-making. If success is defined as delivering facilities that increase the number of cyclists whilst reducing the number of collisions then the LCN+ was a partial success and so lessons can be learnt from its approach. In particular the paper criticises the use of constrictive performance indicators that distort delivery away from ride quality and towards process driven "box ticking". It also provides a case study showing the extent to which cycle campaigners have journeyed from ambitions outsiders to being at the forefront of mayoral policy making. This paper is an insider's experience of the journey towards the establishment of a "cyclised" society. In conclusion, it highlights the importance of political backing, benefit measuring and having clear project aims.

Developing the Bristol Cycle Network
Chris Mason, Principal Transport Officer, Bristol City Council

The presentation will outline how Bristol City Council are using big data and crowd sourced data to audit, develop and manage the cycle network for the city. A key part of this has been the development of a Live Cycle Network Map which is made available online to all council employees. The map can be used to inform development management, maintenance, major schemes, bidding and other activities, and includes the following information:

- ABC classification of the entire network. For example, the “A” routes consist of cycling quietways/greenways and on-road routes used by large numbers of cyclists.
- Average daily cycling and vehicle flows
- Location of cycling infrastructure such as cycle lanes, cycle tracks, shared use paths, and bus lanes
- The quality of the routes, based on BikeAbility level and the Cycle Skills Network Audit approach
- The planned/proposed cycle network, including current programme status and links to relevant contacts and scheme documents

The presentation will discuss how the live map was developed and how it is being used to improve cycling throughout Bristol.

The Internet of Things and the Electric Bike: innovation opportunities for increasing bike ridership and cutting congestion
Simon Ho, Senior Innovation Officer, Transport for Greater Manchester

Session B - Cycling from 8 to 80

Inviting Infrastructure: do preferences differ by age and gender?

Rachel Aldred and Bridget Elliott
University of Westminster

Cycling in the UK is very age- and gender-unequal, while higher-cycling contexts are more equitable. Hence, one might expect that where cycling increases, so does age and gender equity. However, a recent study using English and Welsh 2001 and 2011 Census data (Aldred et al 2015) found that in those authorities where cycle commuting had increased, gender balance had not improved and the representation of older cyclists actually worsened. One pertinent question to ask is, to what extent are even relatively successful authorities building for the cycling preferences – or perhaps the tolerance – of a small, age- and gender-skewed, minority?

This presentation explores this issue further in examining to what extent there are expressed variations in tolerance or preference for different types of cycling environments. It reports on a Rapid Evidence Assessment synthesising relevant evidence found in around seventy academic papers from a range of countries. For gender, and to a lesser extent age, studies suggest there may be systematic differences in attitudes to cycle infrastructure. This implies - contrary to the argument made in Sport England/Department for Transport (2014) - that infrastructure may need to be designed specifically in line with the preferences of currently under-represented groups. The presentation concludes by suggesting what kind of cycling environment this would mean providing.

REFERENCES:

R Aldred, J Woodcock, A Goodman 2015 Does more cycling mean more diversity in cycling? Transport Reviews, 1-17, published online before print

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Understanding cycling over the life course: a comparison between suburban residential neighbourhoods in Newcastle upon Tyne and Rotterdam, the Netherlands.

Wilbert den Hoed, PhD researcher
School of Geography, Politics & Sociology, Newcastle University

Several British national policies acknowledge that active forms of transport improve public health and reduce travel costs, pollution and congestion. Substantial increases in walking and cycling may for example lead to a cost reduction of billions for the NHS (APPCG 2013; Aldred 2014). However, cycling has a number of additional significant benefits that particularly appear along the process of ageing. Evidence from European countries with a large proportion of everyday cycling mobility shows that cycling contributes to independent living, socio-spatial attachment and wellbeing, even when physical abilities recede. Also in a more general sense, an age-friendly city flourishes with high engagement in active travel such as cycling (Prins et al. 2014; Shergold et al. 2014). Additionally, the common focus on ageing in place entails that individual mobility is becoming of crucial importance to social participation and access, emphasizing the need to stay mobile, active and healthy. This study shows based on qualitative

interviewing how successful practices of everyday cycling mobility in the Netherlands provide promising prospects for wellbeing and social inclusion over the course of life in the city of Newcastle upon Tyne, as an addition to associated benefits for public health and an age-friendly environment. Doing so, not only transitions and renegotiations of (cycling) mobility are examined in detail, but also the increasing diversity and heterogeneity in the meanings and experiences defining growing old with will be addressed. Given the general concentration of cycling facilities and infrastructure on urban centres, this study selected two suburban residential neighbourhoods for fieldwork. This may improve our understanding of cycling as a 'normalised' mode of everyday transport and its relations to ageing, wellbeing and the neighbourhood.

REFERENCES:
Aldred, R. (2014), *Benefits of investing in cycling* [online]. Available via <http://www.britishcycling.org.uk/zuvvi/media/bc_files/campaigning/BENEFITS_OF_INVESTING_IN_CYCLING_DIGI_FINAL.pdf>. Accessed on November 17, 2014.
APPCG (2013), *Get Britain Cycling: Summary & Recommendations* [online]. Available via <https://allpartycycling.files.wordpress.com/2013/04/get-britain-cycling1.pdf>. Accessed on January 15, 2015.
Prins, R.G., F. Pierik, A. Etman, R.P. Sterkenburg, C.B.M. Kamphuis & F.J. van Lenthe (2014), How many walking and cycling trips made by elderly are beyond commonly used buffer sizes: Results from a GPS study. *Health & Place 27*, pp. 127-133.
Shergold, I., G. Lyons & C. Hubers (2014), Future mobility in an ageing society – Where are we heading? *Journal of Transport & Health 2* (1), pp. 86-94.

Set the children free - on active transportation in children's school mobility
Oskar Funk, Research Assistant
Institute for Environment, Social & Spatial Change Roskilde University
Supervisor: Associated Professor Lasse Koefoed

In this paper, I explore the potentials for a greater degree of active transportation in children's daily mobility to and from school. The empirical data was gathered as part of my Master thesis at Roskilde University in the spring of 2014. It consists of questionnaires, observations and interviews with children from grades 3-6 and their parents in a private school in Copenhagen. This paper contributes to the discussion on active transportation in children's daily travel to and from school, by including the perspective of children's own experience of independent travel and surveillance. I use Henri Lefebvres rythmanalysis and critique of everyday life, in order to explore the conditions and potentials for active travel in school transportation. Everyday life consists of both routines and repetitions that constitute the daily practice, as well as the potentials to change these. While parents are hesitant to let their children travel unsupervised in an urban space dominated by automobility, the children are able to master their own movement in this environment. The trip to and from school o_ers a possibility for active and independent movement for the children, however, there is a conflict between parent insecurity in letting their children travel on their own hand, and children's desire for active and unsupervised travel. It is possible for parents to overcome their fear of letting their children use active travel to and from school, however daily practice, especially around trip to school, leaves little space for trying out and building up new practices.
Keywords: Cycling, Children's mobility, Surveillance, School Transportation, Everyday Life.

Cycle BOOM

Corresponding author: Dr Carl Mann; Co-author: Dr Justin Spinney
Cardiff University on behalf of the cycle BOOM team

Mobilities research has recently raised questions regarding emotion and affect while 'on the move'. There remains a debate as to the optimal methodology to gain insight into such internal experienced states as we navigate through our environment. Here, we argue that bio-sensing technology can be a valuable tool in understanding our experience of the mobile world. The present study forms part of the 'Cycle Boom' project, currently investigating older cyclists and their engagement with cycling across four major UK cities. By collecting a combination of video, biometric and spatial data, we take a holistic approach to exploring issues faced by older cyclists in a modern urban setting. We record Galvanic skin response (GSR) and proximity data in conjunction with GPS tracking while cyclists move around a way-marked cycle route with the aim of producing a 'map of affect'. We seek to understand how both internal (sympathetic nervous system response) and external stimuli (route design, road surface, traffic behaviour) combine to effect cycle experience. Subsequent video elicitation interviews support this data with a further exploration of participant experiences of the ride. We focus on what makes cycling a positive or a negative experience using shared (i.e. by motorists and pedestrians) spaces and issues that would improve engagement with cycling. We tested 30 participants, half of whom cycle regularly and half that cycle less so to gain insight into the different issues that face the modern cyclist. We argue that this unique paradigm provides a meaningful source of qualitative and quantitative data, with which we seek to ultimately engage with policy makers in transport planning and urban design. By doing so, we hope to promote continued cycling into later life and to assist those who are more reluctant to reconnect with cycling. Preliminary results will be discussed.

1 cycle BOOM *is led by Dr. Tim Jones, Senior Research Fellow, at Oxford Brookes University supported by Dr. Ben spencer and Nick Beale and working in collaboration with Prof. Carien van Reekum, Dr. Emma Street, Dr. Philip Black and Dr.Louise Leyland at the University of Reading, Dr. Justin Spinney and Dr. Carl Mann at Cardiff University and Dr. Kiron Chatterjee and Dr. Heather Jones at the University of West of England.*

**cycle BOOM is funded under the UK Research Council's Life-Long Health and Wellbeing programme (Grant No. EP/K037242/1). More details about the study are available at www.cycleboom.org and by following our blog and regular tweets @cycle_BOOM*

Session C – Conflicting notions of cycling

Cycling in the city, traffic law breaking, lawless cycling society
Lucas Brailsford, Urban and graphic designer
Lucas Brailsford Design, Amsterdam

Amsterdam has become synonymous for relaxed drug policies. Laws exist to prohibit the sale of both soft and hard drugs, yet the enforcement of these laws is fluid and circumstantial. The Dutch legal system is rooted in public health and safety, and if an act causes little to no harm to society, than law enforcement collectively turns a blind eye. Interestingly, this is also the approach the Dutch take to cycling traffic law enforcement. There are numerous traffic laws in place to curtail reckless cycling behavior, but they are so rarely enforced that disobeying these laws has become commonplace and acceptable social behavior. It is important to understand why it is socially acceptable for cyclists to break traffic laws in an otherwise law-abiding culture. At the center of this issue is an interesting narrative useful for other countries grappling with the challenges of stimulating a new cycling culture. After all, while laws governing cyclists are lenient, traffic laws applying to motorists are strict. In an event of an accident with a cyclists and a vehicle, the majority of the fault falls on the motorist in each situation. Even if an accident occurs when a cyclist is breaking a law, such as crossing the street through a red light, the motorist cannot argue that this was unexpected and the accident unavoidable. Motorists have the responsibility to be aware of cyclists engaged in erratic and illegal behavior because they so regularly disobey traffic laws. Understanding the hierarchy of these laws can help influence policy and normalize cycling as a dominant means of transportation in other societies. This presentation explores the reasons for this fluid law enforcement through qualitative interviews and analysis of road accident data to make the case for a more lawless cycling society.

The sensescapes of cycling
Cosmin Popan, PhD Student
Lancaster University

Visual perception is of uttermost importance for cyclists orienting themselves in urban environments, wherein the imperatives of 'See!' (and 'Be seen!') can make a dramatic difference between a safe ride and an unfortunate traffic event. Drawing from the work of J.J. Gibson (1938) in the domain of ecological psychology, in this paper I delineate the characteristics of the 'visual field of safe travel' in relation to cycling. In doing so, I also expand Gibson's overtly visual (and carfocused) account by bringing to the fore a plethora of other senses that make cycling a distinctive mobility practice. Arguing that senses not only function as mere sensations and feelings, but as effective ways of 'making sense' of the world (Rodaway 1994), I show how *cycling sensory scapes* are substantially different from those afforded by the car, where indeed one is often completely 'carcooned' not only from risks and dangers, as Urry and Kingsley (2009) argue, but from a more rich and meaningful perception of the environment. The sensory scape surrounding the bicycle rider opens up her body not only to a more unmediated perception of the environment itself, but it makes possible the very articulation of political and cultural discourses about liberation, counter-culture, alternative and green(er) lifestyles or post-capitalist societies. This presentation draws from an autoethnography of my cycling experience in London, which is documented with a mixture of mobile methods (Büscher and Urry 2009), featuring video and audio recordings.

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Violent traffic: men, masculinities and road conflicts in 'cycling friendly' Sweden

Dag Balkmar, PhD Postdoctoral researcher
Centre for Feminist Social Studies School of Humanities, Education and Social Sciences
Örebro University

When cyclists begin to take up more space in traffic than before, conflicts appear. The number of cyclists in Stockholm city has increased with more than 70 % in a decade (150 000 cyclists/day). In Sweden, a country where cycling is considered 'normal' and relatively 'safe', there have been media reports about "hatred" against cyclists when describing the antagonism between (male) cyclists and (male) car drivers, as well as between cyclists and pedestrians, in traffic-dense environments. A male cyclists comments to the Swedish Television about the Stockholm traffic situation: "There is a general hatred towards cyclists. Things are thrown at me, I got spayed with windscreen washer fluid etc. It's way too much of that" (van Luik 2013). Given the current political renaissance of cycling in Sweden, conflicts between more or less vulnerable road users are becoming increasingly important to investigate in a society where the hegemony of the car needs to be challenged in favor of more sustainable travel.
The aim of this presentation is to, based on media material, interviews and cyclists online discussion-forums, discuss cyclist's situation in traffic-dense environments from an intersectional gender and violence perspective. Violence, with its multiple and varied forms and expressions, takes many forms. In this presentation, I address violent traffic, hence bringing discussions about violence in traffic to the analytical core. Following this, the presentation addresses not only the conditions for achieving sustainable mobility in a culture where the hegemony of the car is being challenged, but the need to problematize men and masculinities in relation to sustainable mobilities and urgent shifts in mobility patterns.

Session D - Cycling Uptake (Chair: Katja Leyendecker)

Public health overview
James Woodcock, Senior Research Associate
Centre for Diet and Activity Research (CEDAR), University of Cambridge

We all know that cycling is good for health but what is the evidence base and when do trade-offs matter?
In this talk I will summarise the evidence base on physical activity and different health outcomes. Issues covered will include the different diseases affected, time-lags to health events, how effects vary by baseline activity levels, and which groups are likely to see the largest benefits. I will present data on injury risk for cyclists, and how this varies depending within and between countries. I will indicate some of the limitations of the data available. I will discuss the latest evidence on the health impacts of exposure to air pollution whilst cycling. Issues covered will include increased ventilation rates while cycling, variation in exposure by road type, and variation in exposure by road position. I will then use health impact models to suggest how health benefits and risks might trade off in different settings.

The development of cycle commuting centres from a social practice perspective
Dr Paul Wilson, Senior Lecturer, University of Salford

Background: Cycle commuting centres, as material structures, are able to address many of the barriers associated with cycling to work through the provision of secure parking and changing facilities however; their influence on the overall practice associated with cycle commuting is less clear. On this basis, the application of social practice theory to the development and usage of such centres appears pertinent.
Method: Interviews with stakeholders and regular cyclists, from established and disestablished cycle commuting centres, alongside online newspaper comments on the development of a new centre were used as data sources. Developed themes were then considered from a social practice perspective based on the emerging relationships between the material aspects of the centre with competences and meanings associated with cycle commuting.
Results: The complexity of cycle commuting as a practice led to the development of three separate foci; residence, journey and workplace enabling comparisons with other practices to be identified as the material influence of the centres were explored by structure, content and location alongside the user's residency and interaction.
Conclusion: The reduced residency costs living away from city centre employer locations can provide is offset by the individual's ability to cycle this distance thereby affecting the convenience and financial benefits cycle centres offer. Alternatively, residency located nearer the employer is associated with enhanced levels of affluence and associated car usage. Central city locations for centres are also affected by enhanced financial cost which limits their design and capacity by occupying buildings they were not originally designed for. Despite this, centres are successful in relocating competences from the individual, such as security, into material infrastructures whilst also acting as a transition point for a change in social identities from the journey to the workplace that are able to match or exceed those offered by other forms of transport.

Bicycle route choice data – an overview of methodological approaches.
Raymond Pritchard, PhD Candidate
Norwegian University of Science and Technology

The route choice of bicycle users is known to be strongly affected by the physical environment. Topography, proximity to traffic, intersection frequency, surface quality, scenery and directness are all influential factors for the utility cyclist. These cyclists make trip journeys for the purpose of taking trips to see friends, go to the shops, school, work and other utilitarian destinations.
Through asking utility cyclists to plot their preferred route between two well-known points in their urban locale, it is possible to draw some insights into the importance of these factors. Data can be used to observe average deviation from shortest route, percentage route length taken on partially or fully-separate bicycle infrastructure amongst others. Differences in rates of bicycle use can be cross-analysed with demographic data such as age, ethnicity and gender data. This may help bicycle action groups and local governments to understand what values are important amongst particular target groups (e.g.: the elderly or immigrant population).
The city of Trondheim in Norway is used as a test-bed for these theories. The hilly terrain of the city generally means that there are a relatively large variety of route choices between any two locations, as the road and bicycle network adapts to the landscape in a non-uniform manner. Both surveys and interviews are to be used in order to gather data on route choice, by targeting particular regions where cyclists are likely to be familiar with the origin and destination points. Whilst the city has a particularly large student population, it is intended to additionally target other groups of bicycle users in order to develop a representative sample. This will assist in making the findings applicable to other Norwegian cities, and allow for comparison with international studies of the same nature.

The National Propensity to Cycle Tool: building an on-line interactive tool to prioritise where to investment in walking and cycling
Robin Lovelace, Leeds University

The National Propensity to Cycle Tool (NPCT) was proposed in late 2014 by the Department for Transport (DfT) to enable better prioritisation of funding for cycling in England and beyond. This involved analysis of current cycling behaviour, scenario-based models, and the creation of an on-line interactive tool. The paper focuses on the interactive tool, which aims to empower policy-makers, transport planners and the public to help prioritise investment in walking and cycling today. Ultimately, this is part of a broader movement to envision and enable the changes needed for Civilisation to transition away from fossil fuels to a post carbon economy.
The paper covers the design, implementation and communication of the tool in roughly equal parts. The tool was designed from the ground-up as a policy support tool, simple enough for use by a range of stakeholders yet flexible enough to provide useful information under a range of user scenarios. The R new package **shiny** was used to implement these design principles in software, providing a framework for on-line user interaction and access to R's powerful graphical capabilities via the open source version of **shiny-server** running on remote Linux machines. User testing is still ongoing. The paper provides a unique insight into the inner workings of the NPCT, an opportunity to test the tool, and guidance on how others can use the underlying software, which is all open source, for improving cycling policies worldwide.

WORKSHOP - Propensity to Cycle Tool: Interactive Workshop

Led by: Robin Lovelace, University of Leeds & James Woodcock, CEDAR, University of Cambridge

Interactive workshop on the DfT funded programme on where to invest money on cycle infrastructure. The Propensity to Cycle Tool (PCT) is an open source planning support tool that is freely available to use online that will be rolled-out across England on a publicly accessible site in 2016. During the workshop you will learn how the tool works and how it can be used for guiding local policies and investment in a strategic cycling network.

For more information: http://www.cedar.iph.cam.ac.uk/research/modelling/npct-tool

Please bring fully charged laptops or tablets.

Session E – Why don't more people cycle? (Chair: Steve Connor)

"Too wet, too windy, too dangerous, too far, too hilly, too hard…"
What are the real barriers to cycling in the UK?
A. Binder, G. Perkins and D. Wildman
Mouchel Ltd.

Cycling is easy to learn, low cost, healthy, low maintenance, efficient and accessible – getting more people cycling can deliver economic, social and environmental benefits so why are cycling levels in the UK so low? Ask a 'person on the street' why they don't cycle to work and there's a good chance you'll be told it's "too wet, too windy, too dangerous, too far, too hilly, or too hard" but these aren't real barriers, they're excuses. We don't really understand what makes people cycle either. Ask "cyclists" or people cycling why they're riding a bike and the reasons are likely to be everything from getting fit, to not being able to afford the train, to having a pregnant wife that has borrowed the car.

So what are the barriers to cycling?

- Behaviour?
- Social?
- Cultural?
- Personal?
- Educational?
- Infrastructure?
- Technological?

Are human factors more important than engineered ones?

If people were taught to cycle with confidence and drivers were taught better consideration of people cycling would the issues of safety all but disappear? If riding a bike for any reason became socially and culturally normal would more people do it? If all people could have access to a bike through bike recycle type projects would personal and financial barriers fade away?
Is a lack of bike specific infrastructure even a barrier? Is spending money on infrastructure better value than softer measures, probably not; is spending money on poor infrastructure worse than not spending anything, probably. What impact might advances in technology have on cycling, for example will autonomous vehicles mean there is no need to think about bike specific infrastructure?

This paper poses these questions and more, and seeks to explore available information to try and understand if we have any idea why people cycle, what the barriers to entry are, what are we doing to encourage cycling and is what we're doing right.

Flattening out Norway - a study of electric bicycle users

Tor Brørs, Robert Næss and Jøran Solli
Department of Interdisciplinary Studies of Culture, Norwegian University of Science and Technology

The Norwegian city landscape has not been particularly well developed regarding cycling infrastructure. The landscape is also very much characterized by hills and long inclines, which probably has shaped Norwegians use of the cycle as a vehicle of training and a preference for off-road bikes and extreme sports. However, connected to a stronger focus on alternative transportation and the climate problem and to some extent development of improved cycling infrastructure, we now can observe the emergence of a new type of cyclist – of electric bicycles. Taking the city of Trondheim as a case, we have interviewed users of electric bicycles. Our study explore their ways of making sense of their use and the social practices they take part in their everyday use of their electric bicycle. A key aspect developed in this paper is their emphasis on the electric bicycle contributing to a flattening of Norway. Riding the electric bicycles transforms the relatively steep landscape to a flat landscape, which for the users imply that they prefer the electric bicycle as the main vehicle for transportation to the workplace, kindergarten etc. Understanding the emergence of this group of cyclists may have implication for the further development of infrastructures, of how issues of health and transportation are connected and shaped in both public and corporate policies.

Perception of social class and status attached to cyclists acting as barrier for cycling

Magda Cepeda, PhD Student
Institute for Transport Studies, Leeds University

The use of bicycle is becoming an essential part of the agenda of different governments around the world to overcome economic, social and environmental problems. However, in the choice to cycle there are individual barriers such perception and attitudes that may deter people from doing it, and lack of attention to these barriers may lead to limited effect of governmental interventions aimed to increase the levels of cycling for commuting. The existent literature states that cycling may be associated with issues of social class and status, and this is attempted in the present study, in which it is argued that a key determinant of the choice to or not to cycle is the perceived socio-economic status attached to the image of cycling and cyclists. A pilot study was conducted in Mexico City following a mixed method research design where qualitative and quantitative research is combined. First, a self completion online questionnaire was sent through social networks, questionnaire which contains theory based questions (extended version of the Theory of Planned Behaviour which includes affective and symbolic factors) as well as one section for questions based on the Segment Project EU in order to test the existence of the same transport segments in Mexico and Europe. Secondly, semi-structured interviews were conducted to explore more deeply issues about the perceived image of cycling and cyclist. The expected outcomes are to achieve more efficiently targeted governmental interventions and the maximization of transport measures in Mexico City.

Using techniques from market research to help us understand the reasons people do or don't cycle

James O'Hare, PhD Student
Newcastle University

Previous research has shown that cyclists and non-cyclists face a range of barriers to cycling. Many of these barriers are presented by the physical environment such as road safety and cycle parking. Other barriers are presented by the social environment, such as worries about the need to dress smartly for work or trip chaining - with many people feeling that trips such as the school run and commute are most easily made by car (Heinen, 2011).

Companies and service providers use various techniques to understand their customer base, helping them to retain existing customers and attract new ones. Here again there are a range of hard and soft factors which must be considered such as the quality of the product and brand awareness.

This research looks to use techniques which have become common within market research to understand the reasons people do and don't cycle. In order to collect the data required attitudinal surveys covering both the hard and soft barriers to cycling will be distributed online using targeted methods to reach cyclists and non-cyclists.

The findings from this research will help organisations looking to promote cycling to see which issues are important to existing and potential cyclists. Based upon a review of potential methods PLS Path modelling (Hair et al., 2014) has been chosen as the most appropriate to identify the issues which govern how much someone cycles while secondary analysis will be conducted using biclustering to identify groups with similar attitudes beyond the 'common sense' groupings of age and gender (Dolničar, 2004).

In this presentation the results from Wave 1 (summer) of the data collection and initial interpretations will be discussed.

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WORKSHOP

Learning about the cycling city is like riding a bike: it must be experienced

Meredith Glaser, Sophie Schuff, Marco te Brömmelstroet & Bianca Hermansen (Copenhagenize)

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It is well established that cycling is an affordable, efficient, environmentally friendly, and healthy method of transportation in cities. As motorized traffic and car-dominant lifestyles continue to afflict urban areas and their populations, interest in cycling is on the rise. Planning for a cycling city requires knowledge and practice surrounding infrastructure, communication, public transport, and policies that support citizen cycling and only a few key cities are distinguished leaders, namely Amsterdam and Copenhagen. Urban planning and transportation professionals in many cities around the world are in constant search of best practice cases and opportunities for hands-on learning, training, and knowledge exchange. Academic institutions are equally in demand for structured learning opportunities, real-world application and skill building for students. Amsterdam and Copenhagen are currently undertaking the challenge, and obligation, to serve as learning contexts for these groups. However, in case of Amsterdam, a clear understanding of expertise and related skill set are lacking.

This paper begins to unravel the intricacies of the learning process for individuals from very different contexts on the complex topic of urban cycling. Although empirical evidence clearly indicates the dynamic and powerful impact of policy transfer with cross-national knowledge, very little research has explained effective learning profiles for these two very different groups, students and professionals, to learn the skills and knowledge necessary for planning a cycling city. Two different groups of students are assessed and analysed; each group attending unique academic programmes dedicated to urban cycling. These analyses are compared to (at least) two professional groups also attending programmes on urban cycling. Key sub-topics, best practices, and methods for knowledge transfer are discussed. The overarching goal of the paper is to offer a better understanding of the structured learning process for these two groups.

Session F - Cycling Economics (Chair: Paul Wilson)

Cycling and Business Case Appraisal: Innovations and implications

George Weeks, Jubilee Research Fellow at The Prince's Foundation for Building Community & Urban Designer at Transport for London

As a mode of transport, cycling yields considerable and considerable positive externalities. It can also help deliver a wide range of desirable policy objectives. Despite this, cycling has been systematically neglected in British policymaking. UK cycle mode shares are low and cyclists are perceived as a minority.

A major reason for the relative absence of cycling from UK transport policy is technical. Mainstream transport appraisal tools are simply not designed to capture the economic, social and environmental benefits of cycling.

Cycling investment in London is beginning to take place on a large scale. The Mayor's Vision for Cycling in London envisages a £913m cycling investment over the next decade. This is manifested in the ongoing construction of London's North-South and East-West Cycle Superhighways. Transport for London (TfL) has a target for 5% of all journeys in London to be made by bicycle by 2026 – a 400% increase on 2001 levels.

In order to justify this investment, TfL has developed business case appraisal tools that can evaluate the wider benefits and costs of new types of cycle infrastructure. Crucially, this involves a shift away from time-based cost-benefit analysis to a broader-based set of values that provide a more accurate reflection of the costs and benefits of travelling by bicycle. This has major implications; specifically, that it is possible in a UK policy context to apply appraisal methods that justify systematic, long-term investment in cycling infrastructure.

This paper will explore the components of TfL's new cycling business cases. Having explained their fundamental differences from traditional appraisal methods, it will discuss the policy implications for cycling investment in the rest of the UK.

Keywords: Cycling, Appraisal, Business Case, Health, Investment

Modelling demand and economic impact on cycle trails: A case study of three greenways in the Peak District National Park

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Understanding demand on existing or proposed cycle routes can be key to their development. With increasing pressure on local government budgets and greater competition for limited resources the need to demonstrate both 'value for money' and 'return on investment' is important.

This paper presents the findings of a study of demand and economic impact on three trails in the Peak District National Park; the Monsal, High Peak and Tissington Trails. These three popular trails attract significant demand through the summer months, but despite data from automatic counters and regular visitor surveys there is little understanding of the main drivers of demand and economic impact.

The paper will compare the two main approaches to estimation of demand and economic impact: 'top down', using general tourism data and 'bottom up' using route specific counts and surveys. In most studies the overall value of cycle tourism has been calculated as a 'top down' exercise based on regional or national statistics. Thus estimates have been calculated using the average spend per visitor multiplied by the percentage of visitors identified as having cycled during their stay.
The second employs a 'bottom up' approach to estimate direct user spending. The estimates are drawn from route surveys and then factored up according to the route usage data. Whilst this approach has proven to be useful in determining economic impact within local tourism economies it is not without its issues, the potentially high cost of data collection and replicability for example, and in cases where the route is not yet established such an approach is not possible.
This paper will present a 'third way' using a hybrid approach which uses local data to refine regional or national data, allowing estimates to be made of routes where there is limited or no data available.

'The conundrum of public life': Delivering a Cycling Demonstration Towns Project in the North West of England.

Chris White, Lecturer/PhD Student
University of Chester

In 2007 it was announced by Cycling England that Chester was to become a Cycling Demonstration Town. Rather than the typical English local authority spend on cycling promotion, this meant that Chester would receive a sum of money similar to seemingly pro-cycling cities, such as Amsterdam. However there is yet to be an official evaluation of the second round of Cycling Demonstration Towns. This case study was thus designed to analyse the context in which such delivering parties find themselves. Fifteen semi-structured interviews explored the views and experiences of various concerned actors, both inside and outside the core delivery group. The concepts of figurational sociology were employed to help make sense of the research findings. The most prominent finding was that the complex figuration in which deliverers were situated meant that the project encountered several unintended outcomes. This paper concerns the contention that the differing goals of the many groups, and individuals, who were eventually involved with the project, meant that final interventions were often 'watered-down' as deliverers were bound to the interests of these, often conflicting, parties.

Session G – Cycling Practice (Chair: Graeme Sherriff)

Public perceptions of cycle space - method and approach

Katja Leyendecker, PhD research student (Principal Supervisor: Dr Seraphim Alvanides)
Northumbria University

Useable inclusive urban cycle networks have not been built in the UK. The media, public, practitioners, advocates, academia, national and local politics, all have and had a role to play - some active, some passive. Acutely today, and for several decades in the past, UK cities have found themselves in a dilemma: more and more space for cars and driving, some for walking, and very little for cycling - yet categorical imperatives, environmental, social and economic, mean we have to shift away from locking car use and dependence into our transport systems. There is recent revival talk of a 'Cycling Revolution' by the current Prime Minister David Cameron in response to national campaigns, but little talk about where the investment in cycling infrastructure, and ultimately mode-shifting transport transitions, were to come from.

The presentation briefly summarises the historical and current UK contexts for cycling infrastructure, before it takes a look at the public onlooker in the transport and cycling debate. The relatively passive partaker in public spaces is the voter who is often cited by politicians as the source and target for their decision taking. But how much does a member of the public understand and read public space? How much power, responsibility and 'agency' has or feels the 'person in the street' when it comes to envisaging change? Does it vary between countries?

My research investigates locations in Newcastle, UK, and Bremen, Germany, and their participants' public space perception. Starting in February 2015, it is in the early stages. At this point, September 2015, we hope to be able to discuss the interview technique chosen to get under the skin of the individual 'seeing' spatial determinants.

Understanding cycling as an embodied practice

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Many cities are struggling to design infrastructure for a growing number of cyclists. For some this is a response to an already occurring growth while for others this design is aimed at actively increasing cycling. In this worldwide effort there is surprisingly little structural evidence of the actual behaviour of cyclists. This makes it difficult to design solutions that meet their needs. In continuation of the critic of traditional transport research launched by advocates of the mobilities turn we argue that a better understanding of the motivations and needs of cyclists is a necessity in order to ensure a further promotion of cycling. This paper aims to develop a better understanding of how and why cyclsits interact with the physical design, each other and other road users in the way they do. To do so, we apply the analytical framework of Staging Mobilities (Jensen, 2013) that identifies the physical settings, material spaces and design, the social interactions and the embodied performance as the factors that stage ‘mobilities in situ’.

The research is designed as case studies of Amsterdam and Copenhagen, two of the leading cities in terms of urban cycling. The research starts with a number of quantitative desire lines studies of cyclists in a number of urban intersections. This is supplemented with ethnographic observations as well as eleven ride-along interviews in order to study the embodied practice of cycling. The ride-along interviews are conducted with cyclists who have a varying knowledge of the route of study in order to identify how it is perceived by different users. The paper identifies a number of key factors which influence behaviour of cyclist including the feeling of safety, familiarity with the route, the presence of other road users as well as the infrastructural design. This study highlights distinctions between the cycling cultures of Amsterdam and Copenhagen and concludes that cycling needs to be acknowledged by practitioners as a unique mode of transport as the requirements of cyclists differ from those of cars and pedestrians.

Transformative Technologies and Social Change – A Cycling Sub Cultural Case Study.

Tony Rees, PhD Student
Teesside University

Research into the complexities of social practices within cycling subcultures has been neglected in sport sociology and despite the increasingly mediated nature of cycling participation, research on the emerging effects of new technologies is rare. Reflecting a growing acknowledgment within sociology of the role of new technologies in social change and in the way that we conceive and experience social space this research examines through the application of the concepts of Pierre Bourdieu the emerging effects that social surveillance and gamification via online social networks are having on social practices within the subculture of racing cyclists. Increasing engagement with transformative technologies make it difficult if not impossible for subcultural actors not to take part in a social system that increasingly operates on and through social media applications, emerging social spaces in which physical activities are now planned, shared and recapitulated. Social interaction is now extended beyond the physical, but when transferred and presented in an on line setting some subcultural characteristics and meanings are lost. A visible presence in the online environment coupled with the gaze of others results in changes in behaviour and modes of participation. Detachment from shared physical experience compromises systems of social recognition and in doing so raises issues related to the value and authenticity of social resources which challenge and could potentially transform the existing social order. It is clear from initial research that this field is changing, as new ‘rules of the game’ begin to emerge as the shared habitus of racing cyclists is challenged by participants with a habitus being transformed in a more mediated cycling setting. Using an ethnographic approach data have been gathered from empirical analysis of social network interactions. In addition to that collected on line data has also been captured from participant observation and responses from E mail interviews.

Facilitating a Contested Practice: Building and growing urban transport cycling in Santiago de Chile

Dr. Viktoria Wesslowski
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While the social and individual benefits of cycling have long been established, public policy efforts to increase urban transport cycling have often fallen short of expectations. This research aims to achieve a better understanding of the development and the effect of pro-cycling measures. The research uses a practice approach and is based on qualitative data from an in-depth case study of urban transport cycling in Santiago de Chile, generated from semi-structured interviews, participant observation and document analysis.

Two approaches to facilitating urban transport cycling were identified in the field: 'building practice' is the government-led provision of material infrastructure for cycling; 'growing practice' includes a variety of civil society-led activities that provide support for the everyday engagement in the practice.

The research argues that 'building practice' is not a purely technical challenge, but rather a contested political process shaped by the dominant practice of driving embedded in the system of automobility. In the case study, myths about cycling as well as evaluation standards for cycleway projects had developed within the system of automobility and ensured the continuity of car-centred planning.

On the contrary, growing practice interventions are developed by the urban cyclists themselves. The research shows that these activities do not only provide targeted support for individuals, based on the in-depth knowledge of the everyday engagement in the practice, but also contribute to the creation of a community of practice. The small-scale nature of the activities, however, often caused these interventions to be overlooked in the policy debate.

The research concludes that facilitating urban transport cycling is a complex undertaking, which differs drastically from the neatness of the linear-causal relationships of behavioural models, which are the basis for most policy interventions today. The two approaches 'building practice' and 'growing practice' face individual challenges, but offer complementary benefits and should both be included in a comprehensive urban transport cycling strategy.