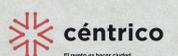




**CYCLING IN  
MEXICO CITY:**  
A COLLABORATION  
BETWEEN MEXICO CITY  
AND LONDON

UNIVERSITY OF  
WESTMINSTER 





## FROM ONE BIG CITY TO ANOTHER

Rachel Aldred

When I arrived in Mexico City for the first time, I loved it. I have lived in London for 20 years and I like big cities. CDMX is one of the biggest and best. The city itself has 8 million inhabitants, while the ZMVM – Metropolitan Zone of the Valley of Mexico – has an extra 12 million.

Of course, the city has many problems, from water shortages to violence. In terms of mobility, while the metro, the Ecobici system, and the Metrobus are quite cheap, a large part of the metropolitan area does not have access to these methods of transport. Women experience a high rate of sexual assault on public transport, and this is a reason for some to choose to cycle instead. In terms of cycling, while there are differences, there are also similarities between London and CDMX. They both have low levels of cycling (around 2% of trips), but both cities have experienced rapid growth. Both have recently built new cycle routes; however, most main roads lack secure cycle infrastructure. In London, 3 out of every 4 bike trips are made by men, in CDMX the rate is even higher: 4 of every 5 trips.

At a personal level, when I used a bike in CDMX, the experience and the feeling of risk were not that different to my usual experience in London. In other words, sometimes it's a good experience, but sometimes it can be terrible! During my visit, I stayed at a hotel in La Condesa. I liked having a cycle track right in front of my hotel and used it a lot. I was happy to see that this cycle track was almost always free of parked vehicles, and I felt that driver behaviour in this regard seemed much better than in London. However, some Mexican colleagues suggested that I should go and see the same street a bit further down from my hotel – and there I discovered a bike lane full of parked cars. It seemed that infrastructure and behavioural norms were not the same everywhere.

We continued to follow this theme in our methodological workshop. There many participants were speaking of inequalities in CDMX, in terms of infrastructure, safety, and

types of cyclists. For instance, Mexico still has not only bike couriers, but also those selling street food, using tricycles to transport their tamales and tortas. In London, we are starting to rediscover cargo bikes as if they were something new. For CDMX, this tradition has never died. However, there is an urgent necessity to think of how to improve the situation of delivery workers and others who work on bikes, who often have few employment rights and sometimes experience great danger in the street, with a lack of adequate infrastructure.

To finish: what else might London (and other cities of this size) learn from CDMX? The 'Sunday Strolls', of course – and other organised rides; night rides, fancy dress rides, etc. Every Sunday 55km of streets in CDMX are closed to motorised traffic, and open to people. For the inhabitants of CDMX this is now normal, but for a resident of London (where to organise just one car free day is so difficult) it appears a miracle. We can also learn from the use of protected infrastructure which is not perfect, but which can be rapidly installed, relatively cheaply, and perhaps even as an experimental trial. It's interesting to see the integration of transport services through a smartcard system that can be used to hire bikes as well as on public transport. It's also good to see so much open data, even including individual-level anonymised travel survey data.

I look forward to the cycling conversation between London and CDMX continuing, because there is so much more to learn and to share.

## **MOVING BY BIKE IN TWO MEGACITIES:** LONDON AND MEXICO CITY

Alejandra Leal

When in Mexico City we're giving examples of how to increase cycling, I like to talk about London. Both cities have developed infrastructure that favours car use, in contexts of high population density that require modes occupying less space, generating lower emissions and lower injury risks. The measures that London has taken in recent years to promote sustainable mobility indicate that we can quickly get to a turning point at which more people start walking, cycling, and using public transport. Currently in both cities cycling levels are around 2% of trips.

During my visit to London I could confirm that London and CDMX have similarities in their challenges in trying to improve street design. One of them is that London is divided into boroughs, with each borough having authority over changes to its roads. Only 5% of roads are controlled by Transport for London (TfL). Moreover, changes to streets require consultation in each borough that is involved. Which is to say that when a project crosses many boroughs, there are many actors that must be brought on board, and some may decide that they do not want to make changes, creating a difficulty in planning at the metropolitan level. Although in Mexico City the secondary streets are controlled by the district mayors, the primary routes are controlled by the city government, and these represent a higher percentage (9%) allowing a greater influence. Moreover, the co-ordination mechanisms are much more flexible in CDMX. I believe that the implementation of cycling infrastructure must have as a decisive element the net social benefit that it generates both for those who inhabit the area, as well as those who travel through it, at the metropolitan level.

One of the measures that surprised me most is TfL's proposal to reduce speed limits to 20mph in Central London, as part of its commitment to ending road deaths and serious injuries, which was recently open for consultation. Another strong message is the program led by the mayor to reduce motor vehicle

emissions and protect the city's children. Such announcements from the authorities can strongly influence what happens in our streets, and we are lacking this in Mexico City.

One of the cases of success that can be seen is in the borough of Waltham Forest, in Outer London, where £30 million has been invested to improve walking and cycling and promote local activities. The success is exemplified in watching a girl skate and a boy play football in the street. Traffic calming helps make people feel at home in the street. Communication and engagement activities have gone alongside new infrastructure. I took the opportunity to attend a festival in a park, organised by the local mosque, where there were bicycle repair workshops, information about routes, cycle training, etc. These actions can help to build a culture of cycling in the city.

The growth in cycling since my first visit in 2012 is obvious. CDMX saw such a change in 2011, after the 'Ciclovia' in the Paseo de Reforma together with the Ecobici system of bike sharing. In London, one of my favourite cycle tracks is that on Victoria Embankment, constructed in 2016. It is a three-metre-wide track along the River Thames in the heart of London, from which you can see spectacular views of the London Eye, Big Ben, and the majestic bridges over the river. As in Avenida Paseo de la Reforma in Mexico City, this infrastructure sends a signal that cyclists are welcome, with high quality infrastructure, in the city's most loved streets.

Another experience was seeing the great number of people cycling in morning rush hour over Blackfriars Bridge. I saw pelotons of 50 people a minute, of whom only a few were women. The great majority wore sporty clothing and used a helmet. Their way of cycling is fast and vehicular, which could be the reason why there are few women, older people, and children. I spoke with a couple of women at the traffic lights, who said they had their work clothing in their rucksacks and

that they were more comfortable in Lycra. In CDMX it isn't common to see people using Lycra. There are those who work on their bicycle, such as messengers, or those who use tricycles to sell bread, tamales, etc. alongside a growing group of people with casual or work clothes. Very few wear sporty clothing.

Finally, intermodality in train stations was also of interest. With London being the home of the best folding bicycles, it was not strange to see them being used by people arriving by train, ready to go to work in the city. It is something that I would like to see much more in stations such as Buenavista in Mexico City, including folding bicycles, but above all to use private bicycles that complement the high demand that Ecobici already, alongside dockless bicycles.

Mexico City and London can learn from each other, from their problems, challenges, and successes. I think that the most important lessons are linked to integrating strategies, where on one side we offer better infrastructure and on the other we implement programs that limit the use of cars, like the congestion charge, limited on speed in central areas, and aiming to reduce emissions from motorised traffic. These are great examples of actions that CDMX can adapt to our context, and hence create places where more people use the bicycle as a mode of transport that is efficient, safe, and enjoyable.



## THE METHODOLOGICAL WORKSHOP

Rachel Aldred

In June 2019, we organised a methodological workshop in Mexico City, focused on analysing cycling mobility at junctions using audio-visual tools. The workshop enabled us to better understand how cyclists used infrastructure and streets, in very different places and neighbourhoods. It was a collaboration between the Universidad Autónoma Metropolitana in Mexico City, the Laboratory of Cities in Transition, Céntrico, Westminster University in London, and Bicitekas.

**Dr. Ruth Pérez López**, anthropologist and Conacyt Professor at the Laboratory of Cities in Transition (UAM-Cuajimalpa) was the main organiser. Ruth is a strong advocate for walking and cycling, based on her wide-ranging research, both qualitative and quantitative, as well as her activism with Bicitekas. For instance, she has studied how pedestrians cross the streets in CDMX, including a comparison with Spain and Germany. The workshop drew on her expertise, and the expertise of **Alejandra Leal** in her studies of cycling in CDMX, and on the expertise of **Tiffany Lam**, expert in gender and sustainable mobility, in their research on cycling in London.

The workshop started with presentations and discussions on the use of visual and mobile methods, quantitative and qualitative, in studying urban cycling. At the end of the first day, we distributed cameras to six groups of participants. They chose intersections to study on the second day, and after making their observations prepared slides with initial results. On the third day, we listened to the groups speaking of their research and analysis.

*'I arrived at the cycling mobility workshop to understand how the city's cycling flows are measured and analysed. It is often said that we are in the early stages of such analysis, which is true, so I also valued the experience of Ale and Ruth, who are research pioneers in these matters and of course the involvement of two London researchers, a capital with which (although we do not believe it) we could compare ourselves with, in terms of cycling. It was an intense experience being in the field taking data, observing people. In this regard I missed the journalistic approach, asking people the reasons for their trip, how safe they feel or maybe even why they use that route. But on the other hand, it was good to put aside my journalistic "deformation" and look "sceptically" without contaminating the results with my questions. Can a flow tell you all about cycling in the city? No, but it can help to clarify at least two basic mobility questions: how are we going and where?'*

*In addition to all this, I was also looking for ways to understand these processes to be able to narrate or disseminate them better in the magazines in which I collaborate. Needless to say, the workshop met all these personal goals that I have set, and I appreciate the opportunity to meet. Greetings, and hope soon everyone in each part of the world can ride in peace.'*

**Georgina Hidalgo Vivas**, participant and journalist

## PARTICIPANTS

We had twenty participants in the methodological workshop, in which we studied experiences and cultures of cycling in Mexico City, using cameras at a sample of intersections to record the behaviour of cyclists, and of other road users around them. **Thanks to all our participants:**

*Brenda M. Martínez, Carla Valencia, Carlos Mancilla, Eugen Reséndiz, Gabriela González, Georgina Hidalgo Vivas, Hilda Ortíz, Hulises Gutiérrez Barrera, Isabel Méndez, Izchel Adriana Cosío Barroso, Jacqueline Guarneros, Laura Paniagua, Luisa Ferchanda, María Hermosillo, Maricruz Morales, Miriam Ram, Mónica Sánchez Becerril, Paolo Castañeda, Pilar Mendoza, Tania Hernández.*

Most of our participants were women: doctoral students, researchers, and activists. In terms of disciplines, there was much variety! Below are a sample of five short biographies.



**L.N. MARICRUZ MORALES ZÁRATE, Instituto Nacional de Salud Pública**

I am a nutritionist. My area of interest is research in Public Health and Physical Activity, which is why I currently work as a researcher in the Department of Physical Activity and Healthy Lifestyles in the National Institute of Public Health, in Mexico. In my country, overweight, obesity and diabetes are problems that increasingly affect more Mexicans and have a multifactorial origin, including the built environment. Accessibility in the CDMX is an aspect of the built environment investigated by us. The evaluation of the forms of active transport within the city is a priority to help improve the health problems indicated.

We carry out research that helps the city government to identify opportunities that increase the use of bicycles (public and private) for recreational and transportation activities for young people and adults; and reduce the barriers and risks that currently undermine its use.



**LUISA FERNANDA GRISALES BARRERA, Escuela Nacional de Antropología e Historia**

I was born in Bogotá, Colombia and migrated to Mexico at the end of the year 2000. My main research interest is urban social movements and the relationships that are generated through collective action. I am currently writing my doctoral thesis on the cycling movement in Mexico City, where I explore the diversity of practices and experiences that make up the cycling universe in this city. I analyse cycling demonstrations in Mexico City as ritual forms through which the cyclists mark out space and in the execution of these performative actions, transform this space, transform themselves and their practices from which links are woven, alliances and strategies are defined, and identities created. For me, the concept of vulnerability is important in understanding the cycling movement, providing a means by which to characterise the fragility and invisibility that is involved in moving by bicycle, competing for space with users of other forms of mobility. I do not consider myself as a cycling activist, rather as a militant who traverses the immensity of this metropolis on two wheels.

@luisaferchanda <https://enah.academia.edu/LuisaFernandaGBarrera> y ResearchGate



**MARIA DEL PILAR MENDOZA AGUILAR, Universidad Tecnológica de México**

I am originally from a town called Cuauhtepac, on the northern periphery of the city, belonging to the Mayorality of Gustavo A. Madero. I have been an urban cyclist for about a decade, however, it was not until a few years ago that I became interested in cycling as a research topic. This happened because of my curiosity about the human body, which led me in 2004 to study Physical Anthropology at the National School of Anthropology and History. In that period of my life, I worked on different teams and ethnographic projects, as well as on issues such as ergonomics in urban housing and quality of life. Later, in 2014 I began my degree in Physiotherapy at the Technological University of Mexico. In 2017, to obtain a degree in this institution, I opted for a thesis involving an investigation into cyclist delivery workers of Mexico City, focusing on physical health, ergonomics and biomechanics. This thesis is the basis for continuing a line of research focused on the population, which seeks to promote health by increasing uptake of cycling as part of everyday life.

@bioantropologa



**GEORGINA HIDALGO VIVAS, Ciudad de México, 1972**

Georgina Hidalgo Vivas (Mexico City, 1972). I am currently working as a freelance journalist based in Mexico City. I am a frequent contributor to the travel magazines Travesías and other like Caras. I have written several books, one of short stories *Vodka Naka*, (*Producciones El salario del miedo/ Almadía*) about modern life in Putin's Russia, where I lived during 3 years working as an output editor for Russia Today's Spanish channel. I covered top stories on Mexican culture, urban cycling, Mexican rock, jazz and punk and social issues.



**DRA. MARÍA E. HERMOSILLO GALLARDO, Instituto Nacional de Salud Pública**

I'm a researcher at the Nutrition and Health Research Centre of the National Institute of Public Health in Mexico where I assist with the research methods, design and analysis of different projects and coordinate fieldwork for data collection. Before working at the National Institute of Public Health, I completed a PhD in Health and Wellbeing at University of Bristol in the United Kingdom. My thesis topic was "Urbanisation and Physical activity in Mexico", for which I collected physical activity and environmental data from 4,079 Mexican adolescents. Findings gave an insight of the complexity of the associations between urbanisation and physical activity, being different between adults and adolescents, between men and woman, state and type of physical activity; highlighting the value of examining urbanisation as a multidimensional construct which should be considered in efforts to increase physical activity levels in developing countries. Besides being interested in the effect of the built environment on physical activity, I am interested in how to increase women's confidence in physical activity, cycling and sport.

@MriaHermosillo

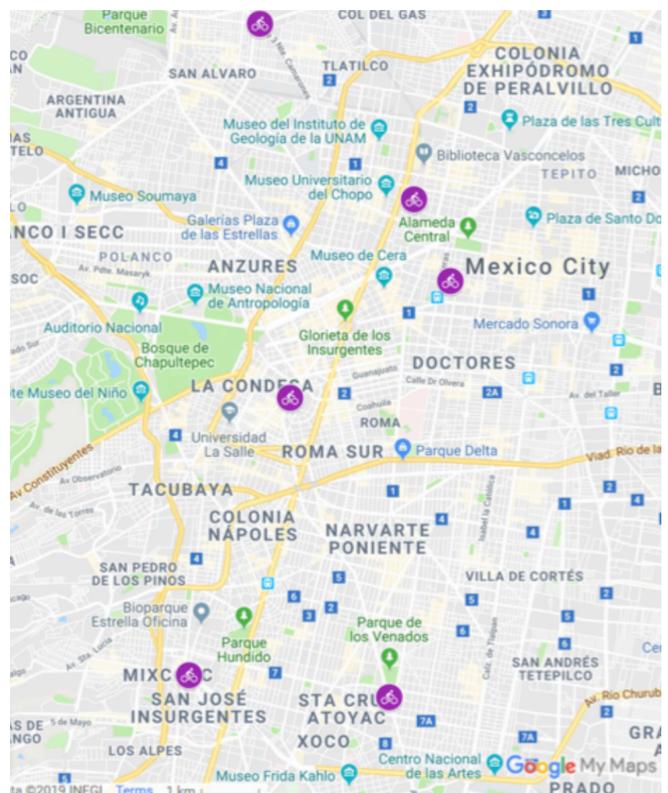
## THE FIELD SITES

Rachel Aldred

The six intersections are very different. Some have cycle infrastructure, some do not; some have traffic lights, and some do not. There are also great differences in terms of types of cyclists and characteristics of the neighbourhoods. For instance, a middle-class neighbourhood, with good quality protected infrastructure, and many people travelling on Ecobici. In other, more working-class neighbourhoods, there were more delivery workers and tri-cyclists. Everywhere most cyclists were male, but this varied – from three in every four, to as high as 99%.



Figure 1: Observation points



## THE WORKSHOP METHODS

We used both quantitative and qualitative methods. Generally, the groups had two cameras to record footage at intersections. We recorded footage in the rush hour and off-peak, for two hours each time. We also wrote down by hand numbers of cyclists, perceived gender and age, what they wore or were carrying, their 'desire lines' and their behaviour and that of others, as well as the intersection context. On Tuesday, the groups collected this data, conducted an initial analysis, and prepared some slides with results to present to the rest of the group on Wednesday.



Figure 2: Group 5, Colosio y Jesús García

## RESULTS FROM THE WORKSHOP

Rachel Aldred

We discovered different results in different places and tentatively linked these to differences in context and Infrastructure. For instance, in Nuevo León, with relatively good (and generally obstacle free) infrastructure, there was a higher percentage of women than in other places. We also saw conflicts between users, sometimes with conflicts between cyclists and pedestrians, where most of the available space had been given over to motor vehicles. This was the case in Intersection 1, between Revolución and Mixcoac. There the pedestrian infrastructure could not cope with the pedestrian flows, given the presence of a market. Because of this, some pedestrians used the cycle track, creating conflict with the cyclists, some of whom in turn then used the street, a major road with high speeds and many lorries. On the other hand, in Nuevo León (Group 2) nearly all the cyclists (over 90%) used the infrastructure provided instead of the footway or road and used it in the correct direction (cycle tracks in Mexico City tend to be unidirectional).

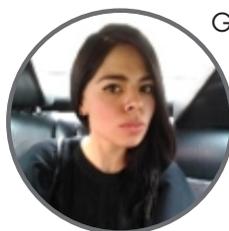
At the Camarones Roundabout (Group 3), which is very complex and full of vehicles, there were many cyclists using complicated manoeuvres: for instance, going all the way around the roundabout in the opposite direction to traffic flow, like a pedestrian. Also, the group noticed that cyclists would often replicate what other cyclists did, perhaps because they felt more secure knowing that the person in front had done the same; or thinking that the other cyclist's manoeuvre must be the correct way to cycle here.

Group 4 investigated a context that was different again, at a crossroads in the centre. This is a space dominated by men, whether on or off bicycles; in which 99% of cyclists were male. Movement there is closely related to work, and parked cars tend to determine the trajectories of people cycling. Most cycles were being used to carry goods. The group highlighted the importance of considering questions of class, marginalisation, and poverty, not only gender, in studying cycling.

One commonly used term was 'road culture' – or the lack of such, especially by drivers. Group 6 described how drivers and shopkeepers had invaded the cycle lanes. In the image, the cycle lane is unusable, because it is full of vehicles and other objects. Also Group 3 had noted at their roundabout that there were drivers who did not wait for the lights to change, or who waited in the pedestrian crossing area.

*'My experience from the public sector was that attending the workshop was worthwhile, since using these methods to obtain quantitative and qualitative data is very effective for planning for cycling mobility. In the specific case of Naucalpan de Juárez, there are no bike paths, but in the Universal Mobility and Accessibility Directorate where I work, the Ciclovía Master Plan is being generated and of course I am contributing from the knowledge and experience obtained.'*

*The Glorieta de Camarones, which was the crossing that my team studied, is very complex both for the number of roads that join at that point, and for the type of vehicles that travel there without traffic lights or cycling infrastructure. However, we found cycling desire lines that encourage us about where to start thinking about how one might build cycle paths.'*



**Gabriela González Mejía**, participant and employed in local government, in Naucalpan de Juárez, part of the wider Metropolitan Zone of Mexico City.

@lacabriela



Figure 3: Grupo 1, Revolución and Mixcoac



Figure 4: Group 3, Camarones



Figure 5: Group 4, Pescaditos and Revillagigedo



Figure 6: Group 6, División and Presidentes

## WANT TO READ MORE ABOUT CYCLING IN MEXICO CITY?

HERE TIFFANY LAM SUMMARISES SOME RECENT ARTICLES ON CYCLING IN CDMX.

Ballesteros Mancilla, L. and Kulpa Verdín, E. (2016) Ciudad de México rumbo a la Visión Cero Accidentes. en *Carreteras: Revista Técnica de la Asociación Española de la Carretera*, 4(209): 35-42. Discusses how Mexico City has adopted Vision Zero with the aim of eliminating traffic injuries and fatalities. Vision Zero is a part of the city's broader goals to shift towards a more human-centred urban mobility paradigm.

de la Paz Díaz Vázquez, M.S. (2017). La bicicleta en la movilidad cotidiana: experiencias de mujeres que habitan la Ciudad de México. *Revista Transporte y Territorio*, 16: 112-126. The author discusses gender differences in cycling in Mexico City, drawing upon participant observation and semi-structured interviews, and argues that gendered differences in skills, knowledge, technology, time, economic resources and daily routines/activities contribute to gendered differences in cycling.

Leo, A.; Morrilon, D. and Silva, R. (2017). Review and analysis of urban mobility strategies in Mexico. *Case Studies on Transport Policy*, 5(2): 299-305. Analyses urban mobility strategies to improve walking, cycling, driving and public transport in four Mexican cities: Mexico City, Guadalajara, Monterrey and León. Factors that inform development of urban mobility strategies include time and money savings, safety, congestion, accidents, intelligent mobility systems and local pollution. The authors argue that government intervention is essential in urban planning and mobility management, particularly to further sustainability and safety goals.

Martínez Romero, C.F. (2017) Pedalear la Ciudad de México: necesidades, derechos, conflicto y movilidad ciclista en Ramírez Kuri, P. *La erosión del espacio público en la ciudad neoliberal*. Mexico: UNAM, 2017: 355-390.

This book chapter explores the growth of cycling as an alternative form of mobility and the daily experiences of cyclists in Mexico City, within the context of neoliberal urbanism and inequality. The author seeks to contribute to socio-spatial methodologies to study cycling from the perspective of social actors (cyclists themselves), situated within larger discourses of the right to the city.

Meneses-Reyes, R. (2015). Law and Mobility: Ethnographical Accounts of the Regulation of the Segregated Cycle Facilities in Mexico City. *Mobilities*, 10(2): 230-248. This paper illustrates how social practices, everyday legal interpretations and police practices intersect to reinforce car-dominance at the expense of cycling and other forms of urban mobility. As such, whilst cycle lanes and laws that support cycling are important, they are still not enough to challenge deeply entrenched car-centric attitudes and cultures.

Pérez López, R. (2017) Vínculos entre la bicicleta utilitaria, recreativa y deportiva: análisis del impacto de los programas "Ecobici" y "Muévete en Bici" en la Ciudad de México (2006-2012). *Revista Transporte y Territorio*, 16: 220-234. This paper analyses the impact of two public programmes aimed at promoting cycling, launched by the former mayor of Mexico City during his term (2006-2012): "Ecobici," the bikeshare system, and "Muévete en Bici," a Sunday cycling programme. Through surveys and focus groups, the researcher explores representations, feelings, experiences and practices related to cycling and the social, individual and psychosocial factors that enable—or disable—social change.

Soria, D.; Café, E.; Ponce de León, M. and Rodríguez Porcel, M. (2016). Movilidad segura: experiencias del transporte no motorizado en Latinoamérica en *Carreteras: Revista Técnica de la Asociación Española de la Carretera*, 4(209): 54-59. This article discusses three road safety initiatives in Latin America aimed to better protect vulnerable road users. The brief discussion of Mexico covers Mexico City's increased investment in cycling infrastructure and bikeshare (EcoBici) as strategies to increase cycling.

Suárez Lastra, M.; Galindo Pérez, C. and Murata, M. (2016). *Bicicletas para la ciudad: Una propuesta metodológica para el diagnóstico y la planeación de infraestructura ciclista*. México: UNAM, Instituto de Geografía. This book explores the growth of cycling in Mexico City as a mode of transport, as well as its social and environmental impact. The first section consists of a broader discussion of Mexico City's urban landscape, urban mobility patterns and public attitudes towards/perceptions of cycling. The second section discusses Mexico City's cycling infrastructure, including cycle lanes, cycle parking and the public bikeshare system.

Zorrilla, M.C.; Hodgson, F. and Jopson, A. (2019). Exploring the influence of attitudes, social comparison and image and prestige among non-cyclists to predict intention to cycle in Mexico City. *Transportation Research Part F: Traffic Psychology and Behaviour*, 60: 327-342. This study examined the role of psycho-social factors predicting people's intention to cycle commute in Mexico City. Cycling attributes, attitudes to cycling, social comparison and social image, and prestige were the most important factors influencing intention to cycle. People's intention to cycle, therefore, is linked to perceptions and representations of cycling, which suggests that building positive cycling cultures could help encourage more cycling.

