



THEORISING URBAN SUSTAINABILITY TRANSITIONS THROUGH A CULTURAL LENS

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Policymakers and scholars are increasingly taking an interest in the role of culture^{i ii} in transitions to urban sustainability. That is, there is interest in exploring how social meanings, beliefs, values, attitudes and perceptions influence behaviour - including transport modal choices and practicesⁱⁱⁱ. My own research will contribute to this field by looking specifically at bicycle usage and attitudes to cycling in a series of cities around the world. It involves the development of a new framework for analysing the various dimensions of 'cycling culture', so as to understand better how and why this may change over time in a particular place.

The cycling literature observes that urban locations with high cycling modal shares generally tend to have positive views on cycling such as is the case in Dutch cities. Here cycling is an everyday activity practised by women as equally as men, by all age groups, and across all income classes^{iv}. This has led some researchers to conclude that "for most Dutch, cycling is not remarkable enough to pay a lot of attention to"^v or that it is simply "natural"^{vi}. In contrast, negative social views on cycling appear to deter participation. In contexts such as many African urban areas where cycling is stigmatised as a mode of transportation suitable only for the poor, people are unlikely to take up cycling^{vii viii}.

Because of the way in which culture shapes cycling, it is recognised as an important dimension to consider in policy efforts towards everyday cycling. Some argue that in low cycling contexts it might be more vital to focus

on cultural development to support any planned infrastructure development^{ix x}. The assumption here is that it is possible to transform meanings, social norms, and perceptions about different forms of mobility. This assumption is not unique to the cycling agenda. It is resident in the wider policy discourse on transitions to environmental sustainability and as a result “governments have attempted to change the hearts and minds of their populations, and move them away from more polluting, carbon-intensive and wasteful habits of the past...”^{xi}. How do these cultural orientations change?

Within a diverse body of literature in transportation studies^{xii}, mobilities^{xiii xiv}, transitions theory^{xv xvi xvii xviii xix} and cultural sociology^{xx}, there is a significant debate as to whether culture can be intentionally transformed and how this might be orchestrated. Some theoretical approaches in transportation studies such as theory of planned behaviour and value-belief-norm theory hold that culture can be purposefully transformed^{xxi xxii}. Here the change can be undertaken at an individual level since meanings, values and beliefs are understood as particular properties of autonomous individuals. In making their modal choices, these individuals weigh them primarily based on rational utilitarian use values such as efficiencies in travel or associated economic savings. The mobilities literature, on the other hand, foregrounds the experience of the journey itself as an important factor influencing modal choice^{xxiii}. In addition, changes in mobility cultures are situated more systemically. Here meanings, beliefs and values are not unique properties of individuals but are ~~are~~ related and produced by political, economic, social, material and topographical configurations^{xxiv xxv xxvi}). However, in the focus on the systemic drivers of cultural change, the role of agents in the production of change is lost.

The focus in the mobilities literature on the auto-poetic nature of change is similar to some versions of transitions theory where changes in culture are seen as autonomous – beyond the direct agency of actors^{xxvii}. Other approaches for theorising and transforming transportation modal choice – such as consumer choice^{xxviii} urban planning^{xxix} theories – are close to this position but appear to not entangle themselves directly in this debate. Instead they bypass culture altogether and seek to change practices of mobility by putting in place systems of incentives and disincentives that simply make the use of sustainable mobilities the logical option. However, as will be discussed, the results of such efforts may remain marginal. Culture will rear its head and influence mobility choices in spite of the presence of infrastructure and changes to urban form^{xxx}. Amongst these bodies of literature there is therefore an ongoing debate on the dynamics of change in cultures of mobility.

Meanwhile, empirically, in different urban locations there is evidence of shifts in cultural orientations on different mobility forms. To give a few examples, nowadays in the Netherlands, cycling is completely taken for

granted^{xxxii} as part of the Dutch national identity. In the 19th century however, cycling was considered as a completely alien practice; as something done by English people (Ibid). In the same period, in China, the social image of the bicycle evolved from alien artifact to the most widespread normal mode of transportation to one currently locked into status battles^{xxxii}.

This study aims to develop a conceptual framework to analyse changes in cultural orientations towards everyday bicycling in urban contexts. The framework is made of four analytical domains drawn from the multilevel perspective in transitions theory, cultural sociology, and the mobilities literature. These are: context; moments of assembly; outcomes of assembly; and experiences of assembly. The first domain (context) will explore how cycling cultures are shaped by sudden or long-term changes and their interrelationships with the activities of cycling advocates, as well as the formal and informal rules governing cycling and other modes of ground transportation. The second and third domains (assembly and their outcomes) will explore how day-to-day collective cycling subjectivities are created and sustained. The fourth and final element investigates how sensory experiences in each context shape cycling culture development. The analytical framework will be developed by studying historical changes in everyday cycling in Johannesburg, South Africa, and Chicago, United States. This work will be complemented by document analysis of historical developments in Amsterdam, Netherlands; Beijing, China and Bogota, Columbia.

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Njogu Morgan's doctoral research project is entitled 'Cycling everywhere: An exploration of the development of mobility cultures that embrace cycling for everyday purposes'. It is being supervised by Professor Phillip Harrison (School of Architecture and Planning, University of the Witwatersrand, Johannesburg), and Professor Simon Joss (Department of Politics and International Relations, University of Westminster, London).

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- i Aldred, Rachel, and Katrina Jungnickel. 2012. "Constructing Mobile Places between 'Leisure' and 'Transport': A Case Study of Two Group Cycle Rides." *Sociology* 46(3):523–39.
- ii Stoffers, Manuel. 2012. "Cycling as Heritage: Representing the History of Cycling in the Netherlands." *The Journal of Transport History* 33(1):92–114.
- iii Stoffers, Manuel. 2012. "Cycling as Heritage: Representing the History of Cycling in the Netherlands." *The Journal of Transport History* 33(1):92–114.
- iv Pucher, John, and Ralph Buehler. 2008. "Making Cycling Irresistible: Lessons from The Netherlands, Denmark and Germany." *Transport Reviews* 28(4):495–528.
- v Stoffers, Manuel. 2012. "Cycling as Heritage: Representing the History of Cycling in the Netherlands." *The Journal of Transport History* 33(1):92–114.
- vi Pelzer, P. 2010. "Bicycling as a Way of Life: A Comparative Case Study of Bicycle Culture in Portland, OR and Amsterdam." Oxford.
- vii Nkurunziza, Alphonse, Mark Zuidgeest, Mark Brussel, and Martin Van Maarseveen. 2012. "Examining the Potential for Modal Change: Motivators and Barriers for Bicycle Commuting in Dar-Es-Salaam." *Transport Policy* 24:249–59.
- viii Sietchiping, Remy, Melissa Jane Permezel, and Claude Ngomsi. 2012. "Transport and Mobility in Sub-Saharan African Cities: An Overview of Practices, Lessons and Options for Improvements." *Cities* 29(3):183–89.
- ix Jones, Tim, and Laura Novo de Azevedo. 2013. "Economic, Social and Cultural Transformation and the Role of the Bicycle in Brazil." *Journal of Transport Geography* 30:208–19.
- x Nkurunziza, Alphonse, Mark Zuidgeest, Mark Brussel, and Martin Van Maarseveen. 2012. "Examining the Potential for Modal Change: Motivators and Barriers for Bicycle Commuting in Dar-Es-Salaam." *Transport Policy* 24:249–59.
- xi Crocker, Robert, and Steffen Lehmann, eds. 2013. *Motivating Change: Sustainable Design and Behaviour in the Built Environment (Paperback)*. Retrieved October 10, 2013 (<http://www.bookdepository.co.uk/Motivating-Change%3A-Sustainable-Design-Behaviour-Built-Environment-Robert-Crocker/9780415829786>).
- xii Mitra, Raktim. 2013. "Independent Mobility and Mode Choice for School Transportation: A Review and Framework for Future Research." *Transport Reviews* 33(1):21–43.
- xiii Urry, John. 2000. *Sociology beyond Societies Mobilities for the Twenty-First Century*. London; New York: Routledge.
- xiv Jensen, Ole B. 2009. "Flows of Meaning, Cultures of Movements – Urban Mobility as Meaningful Everyday Life Practice." *Mobilities* 4(1):139–58.
- xv Tàbara, J. David, and Akgun Ilhan. 2008. "Culture as Trigger for Sustainability Transition in the Water Domain: The Case of the Spanish Water Policy and the Ebro River Basin." *Regional Environmental Change* 8(2):59–71.
- xvi Rotmans, Jan. 2005. *Societal Innovation: Between Dream and Reality Lies Complexity*. Rochester, NY: Social Science Research Network. Retrieved January 8, 2014 (<http://papers.ssrn.com/abstract=878564>).

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- xvii Loorbach, Derk, and Jan Rotmans. 2006. "Managing Transitions for Sustainable Development." Pp. 187–206 in *Understanding Industrial Transformation, Environment & Policy*, edited by Xander Olsthoorn and Anna J. Wieczorek. Springer Netherlands. Retrieved January 8, 2014 (http://link.springer.com/chapter/10.1007/1-4020-4418-6_10).
- xviii Lachman, Daniël A. 2013. "A Survey and Review of Approaches to Study Transitions." *Energy Policy* 58:269–76.
- xix Geels, Frank W. 2010. "Ontologies, Socio-Technical Transitions (to Sustainability), and the Multi-Level Perspective." *Research Policy* 39(4):495–510.
- xx Collins, Randall. 2004. *Interaction Ritual Chains*. Princeton University Press.
- xxi Ajzen, Icek. 2011. "The Theory of Planned Behaviour: Reactions and Reflections." *Psychology & Health* 26(9):1113–27.
- xxii Jakovcevic, Adriana, and Linda Steg. 2013. "Sustainable Transportation in Argentina: Values, Beliefs, Norms and Car Use Reduction." *Transportation Research Part F: Traffic Psychology and Behaviour* 20:70–79.
- xxiii Jensen, Ole B. 2009. "Flows of Meaning, Cultures of Movements – Urban Mobility as Meaningful Everyday Life Practice." *Mobilities* 4(1):139–58.
- xxiv Sheller, Mimi, and John Urry. 2006. "The New Mobilities Paradigm." *Environment and Planning A* 38(2):207–26.
- xxv Urry, John. 2004. "The 'System' of Automobility." *Theory, Culture & Society* 21(4-5):25–39.
- xxvi Jensen, Ole B. 2009. "Flows of Meaning, Cultures of Movements – Urban Mobility as Meaningful Everyday Life Practice." *Mobilities* 4(1):139–58.
- xxvii Tàbara, J. David, and Akgun Ilhan. 2008. "Culture as Trigger for Sustainability Transition in the Water Domain: The Case of the Spanish Water Policy and the Ebro River Basin." *Regional Environmental Change* 8(2):59–71.
- xxviii Schwanen, Tim, David Banister, and Jillian Anable. 2012. "Rethinking Habits and Their Role in Behaviour Change: The Case of Low-Carbon Mobility." *Journal of Transport Geography* 24:522–32.
- xxix Mitra, Raktim. 2013. "Independent Mobility and Mode Choice for School Transportation: A Review and Framework for Future Research." *Transport Reviews* 33(1):21–43.
- xxx Vivanco, Luis Antonio. 2013. *Reconsidering the Bicycle: An Anthropological Perspective on a New (old) Thing*. New York: Routledge.
- xxxi Stoffers, Manuel. 2012. "Cycling as Heritage: Representing the History of Cycling in the Netherlands." *The Journal of Transport History* 33(1):92–114.
- xxxii Wang, Qiuning. 2012. "A Shrinking Path for Bicycles: A Historical Review of Bicycle Use in Beijing." Vancouver: THE UNIVERSITY OF BRITISH COLUMBIA.