

Cycling, modernity and national culture.

Citation for published version (APA):

Oosterhuis, H. (2016). Cycling, modernity and national culture. *Social History*, 41(3), 233-248.
<https://doi.org/10.1080/03071022.2016.1180897>

Document status and date:

Published: 01/08/2016

DOI:

[10.1080/03071022.2016.1180897](https://doi.org/10.1080/03071022.2016.1180897)

Document Version:

Publisher's PDF, also known as Version of record

Please check the document version of this publication:

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To cite this article: Harry Oosterhuis (2016) Cycling, modernity and national culture, Social History, 41:3, 233-248, DOI: [10.1080/03071022.2016.1180897](https://doi.org/10.1080/03071022.2016.1180897)

To link to this article: <http://dx.doi.org/10.1080/03071022.2016.1180897>



Published online: 13 Jun 2016.



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HISTORIOGRAPHICAL ESSAY

Cycling, modernity and national culture

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ABSTRACT

This historiographical essay provides an overview of extensive recent work on the history of cycling to show the diverse ways in which the bicycle was adopted and experienced across western societies. Two key aspects are explored. First, it discusses the complex relationship between cycling and modernity, including tensions between ideas about cycling as liberating and as a vehicle of social conformity (in relation to gender as well as social class and status). Second, it highlights distinct differences in cycling levels, patterns of use and cycling cultures between nations. It is argued that these differences, which have been historically constituted, explain present-day cycling trends as well as the success or failure of policy initiatives across western countries.

KEYWORDS

Bicycle history; culture; cycling; modernity; national identity; policy

Between the First World War and the late 1950s the bicycle was omnipresent on public roads in many parts of the western world. Thereafter cycling was superseded by motoring and seemed headed for an all-time low. Since the 1970s, however, the advantages of cycling have been highlighted, first by cycling activists, and later also by politicians, policymakers, social scientists, urban planners and public health experts. Nowadays the bicycle is celebrated as a clean, light, silent, sustainable, healthy, flexible, inexpensive, humane and democratic means of personal transport, faster than cars or public transport in crowded cities. It is recommended as the remedy for traffic and parking congestion, environmental and noise pollution, depleting energy resources, welfare diseases and social exclusion. Governments across the western world have launched ambitious cycling policies and rent-bikes have been introduced in several major tourist cities. Bicycle use has increased again, in some countries and cities at a greater rate than in others, although nowhere has it reached pre-1960s levels. However, there are huge and persistent differences between countries: in the last decade the share of cycling as percentage of the total number of traffic movements amounted to twenty-seven in the Netherlands and twenty in Denmark, fluctuated around ten in other Nordic countries and Germany, and around five in France and Italy, and stagnated at three or even less in Great Britain, the United States, Canada and Australia.¹

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¹For more information and sources on bicycle use and policies see H. Oosterhuis, 'Bicycle research between bicycle policies and bicycle culture', *Mobility in History. Yearbook of the International Association for the History of Transport, Traffic and Mobility*, 5 (2014), 20–36.

The so-called ‘bicycle renaissance’ in western society, if disputed in terms of its scale and impact, has triggered interest in cycling’s past, both at universities and outside them.² Historical work published in the 1970s and 1980s was often inspired by countercultural and environmental activism and criticism of large-scale technocratic and car-gearred systems.³ Numerous studies, as well as the contributions to the annual International Cycle History Conferences and some museum exhibitions, have traced the multifarious (both successful and defunct) developments in bicycle engineering. The basic story is now familiar. Karl von Drais’s ‘running-machine’, nicknamed the ‘hobby-’ and ‘dandy-horse’ in Britain, enjoyed only a short-lived popularity around 1820. The idea of fixing cranks and pedals to the front axle of a two-wheeler and balancing while pedalling was a major breakthrough: in the mid-1860s the velocipede or ‘boneshaker’ was introduced in France, followed in the 1870s by the ‘ordinary’ or high-wheeler with a sizeable front wheel and small rear wheel, as well as by a variety of tricycles and quadricycles. The 1890s witnessed the triumph of the ‘safety’ bicycle with its chain-driven rear wheel, diamond-shaped frame and pneumatic rubber tyres, which is the standard to this day. Historical research has also thrown light on developments in bicycle production, initially on a handicraft basis by inventors, hobbyists and artisans, and from the late nineteenth century onwards in more or less large-scale factories, which employed modern business and marketing strategies to boost sales.⁴

Next to the vehicle’s technological and economic facets, historical research has dealt with the activity and experience of cycling, users, advocates and opponents of the new machines, and the associated purposes and meanings. However, social and cultural aspects have not been covered in a systematic way and they tend to be treated as an offshoot of the vehicle’s material evolution, which is often understood as a self-propelling succession of innovations.

²M. Stoffers and A.-K. Ebert, ‘New directions in cycling research. A report on the cycling history roundtable at T2M Madrid’, *Mobility in History*, 5 (2014), 9–19.

³See, for example, A. Ritchie, *King of the Road: An Illustrated History of Cycling* (London, 1975); J. McGurn, *On your Bicycle: An Illustrated History of Cycling* (London, 1987).

⁴J. Woodforde, *The Story of the Bicycle* (New York and London, 1970); R. A. Smith, *A Social History of the Bicycle: Its Early Life and Times in America* (New York, 1972); T. Berlage et al. (eds), *De fiets* (Rotterdam, 1977); M. J. B. Rauck, G. Volke and F. R. Paturi, *Mit dem Rad durch zwei Jahrhunderte. Das Fahrrad und seine Geschichte* (Stuttgart, 1979); J. Franke, *Illustrierte Fahrrad-Geschichte* (Berlin, 1987); *Cycle History: Proceedings of the International Cycle History Conferences*, 1 (1989) to 24 (2014); D. Roberts, *Cycling History: Myths and Queries* (Erdington, 1991); K. Kobayashi, *Histoire du velocipede de Drais à Michaux 1817–1870: Mythes et réalités* (Tokyo, 1993); V. Briesse, W. Matthies and G. Renda (eds), *Wege zur Fahrradgeschichte* (Bielefeld, 1995); W. E. Bijker, *Of Bicycles, Bakelites and Bulbs: Towards a Theory of Socio-technical Change* (London, 1995); N. Oddy, ‘The machine aesthetic: marketing the bicycle in the late 19th and early 20th centuries’, *Cycle History*, 2 (1995), 66–75; R. D. Petty, ‘Peddling the bicycle in the 1890s: mass marketing shifts into high gear’, *Journal of Macromarketing*, 15 (1995), 32–46; M. Jansing (ed.), *Gegenwind. Zur Geschichte des Radfahrens* (Bielefeld, 1995); P. Dodge, *The Bicycle* (Paris, 1996); V. Briesse, W. Matthies and G. Renda (eds), *Wegbereiter des Fahrrads* (Bielefeld, 1997); R. Lloyd-Jones, M. J. Lewis and M. Eason, *Raleigh and the British Bicycle Industry: An Economic and Business History, 1870–1960* (Aldershot, 2000); B. Epperson, ‘Failed Colossus: strategic error at the Pope Manufacturing Company, 1878–1900’, *Technology and Culture*, 41 (2000), 300–20; P. Rosen, *Framing Production: Technology, Culture, and Change in the British Bicycle Industry* (Cambridge, MA, 2002); N. Besse (ed.), *Voici des Ailes: Affiches de Cycles* (Paris, 2002); D. V. Herlihy, *Bicycle: The History* (New Haven and London, 2004); T. Burr, ‘The Cycle of Commerce: Producers and Consumers in the French and US Bicycle Markets, 1875–1910’ (Ph.D., University of California, Davis, 2005); N. Besse (ed.), *The Velocipede, Object of Modernity 1860–1870/Le velocipede, objet de modernité 1860–1870* (Saint-Étienne, 2008); C. Bertho-Lavenir, *Voyages à Vélo: Du velocipède aux Vélib* (Paris, 2011); T. Hadland, *Raleigh: Past and Presence of an Iconic Bicycle Brand* (San Francisco, 2011); T. Männistö-Funk, ‘The crossroads of technology and tradition. Vernacular bicycles in rural Finland, 1880–1910’, *Technology and Culture. The International Quarterly of the Society of the History of Technology*, 52 (2011), 733–56; M. Bäumer and Museum der Arbeit, *Das Fahrrad; Kultur/Technik/Mobilität* (Hamburg, 2014); B. Hachleitner, M. Marschik, R. Muellner and M. Zappe (eds), *Motor bin ich selbst* (Vienna, 2014); T. Hadland and H.-E. Lessing, *Bicycle Design. An Illustrated History* (Cambridge, MA and London, 2014); F. K. Mathys, *Vom Schnelfuss zum Fahrrad. Schweizerisches Turn- und Sportmuseum* (Basel, 1972).

Moreover, the spotlight in this historiography is very much on the so-called ‘bicycle boom’ in the late nineteenth and early twentieth centuries, when the major engineering breakthroughs were realized and cycling was a novel and eye-catching thrill. The period after the First World War, when the two-wheeler became an unspectacular daily means of transport for the masses, has been left underexposed. The dominant interpretative framework is a ‘rise and fall’ story about the upper echelons’ successful introduction of the bicycle as an icon of modernity and its demise as an outmoded vehicle for the lower classes.

This perspective is questionable. It betrays an elitist bias: as if bicycling is mainly historically interesting as long as it is a more or less exclusive and fashionable pursuit, and not significant when it is established as widespread routine. Such distortion is advanced by the selectivity of available sources: commonplace and self-evident utilitarian cycling by the masses has left behind far less explicit traces and documents than the more intensely motivated pedalling of the enthusiastic pioneers who were vocal about their experiences and interests, and who caught the public eye. Also problematic is the suggestion that bicycling, viewed as a more or less uniform practice, followed the same course all over the western world. Explaining the historical development of bicycling in the context of modernization often implies the finalistic logic that it was predestined to be superseded by motoring. Such thinking, which retrospectively reflects American and British developments rather than those in other nations, conveys the impression that the bicycle gave way to the car more swiftly and massively in the course of the twentieth century than actually happened in most countries. With regard to numbers, it was not the bicycle boom around 1900, but the period between the First World War and the 1950s which was the heyday of cycling. There is no simple parallel of growing motorization and diminishing cycling.⁵

All of this does not alter the fact that modernization is a relevant context for explaining the rise of the bicycle in the late nineteenth century, which indeed showed similar patterns across the western world. Yet, for a more comprehensive understanding of cycling in the past 150 years, a broader perspective is needed. This is what the authors of some recent monographs and articles provide. In particular Anne-Katrin Ebert’s comparative *Radelnde Nationen* [*Pedalling Nations*] on the Netherlands and Germany, Hugh Dauncey’s *French Cycling*, Stijn Knuts’s *Converging and Competing Courses of Identity Construction* on Belgium, Til Koglin’s comparative *Vélobility* on Denmark and Sweden, and Carlton Reid’s *Roads were not Built for Cars* on the United States and Great Britain, bring the ‘cultural turn’ in bicycle history to full blossoming.⁶ Without being directly motivated by cycling activism, they address the socio-cultural and political dimension of cycling in a broader timeframe and within national settings. Their work demonstrates that cycling was eventually adopted in western societies in diverse ways and that various national cycling levels and patterns not only influenced bicycle design, but also determined present-day cycling trends and interrelated policies in various western countries. After sketching how the beginning of cycling was related to modernization – a viewpoint endorsed in recent historiography

⁵P. Cox and F. Van de Walle, ‘Bicycles don’t evolve: vélomobiles and the modelling of transport technologies’ in P. Cox, D. Horton and P. Rosen (eds), *Cycling and Society* (Aldershot, 2007), 113–32; C. Reid, *Roads were not Built for Cars. How cyclists were the first to push for good roads and became the pioneers of motoring* (Washington, Covelo and London, 2015); Stoffers and Ebert, ‘New directions in cycling research’.

⁶A.-K. Ebert, *Radelnde Nationen. Die Geschichte des Fahrrads in Deutschland und den Niederlanden bis 1940* (Frankfurt a/M, 2010); H. Dauncey, *French Cycling. A Social and Cultural History* (Liverpool, 2012); Til Koglin, ‘Vélobility – A Critical Analysis of Planning and Space’ (Doctoral Dissertation, Lund University, 2013); S. Knuts, ‘Converging and Competing Courses of Identity Construction: Shaping and Imagining Society through Cycling and Bicycle Racing in Belgium before World War Two’ (Ph.D., Katholieke Universiteit Leuven, 2014); Reid, *Roads were not Built for Cars*.

but not in the one-dimensional way of earlier works – I will discuss how these recent studies underline the relevance of different national bicycle cultures for understanding the twentieth-century history of cycling.

The modernity of cycling

Several authors explain the fascination of the bicycle in the late nineteenth century – the ‘velocipede mania’ in the 1860s was followed in the 1890s by a so-called ‘bicycle boom’ or ‘craze’ in many parts of the western world – as both product and instrument of the ‘ride to modernity’, as Glen Norcliffe aptly titled his book about the introduction of the two-wheeler in Canada.⁷ It was strongly associated with technological and social progress and individual liberation, in particular among the liberal and urban upper- and middle-class citizens who had sufficient means, leisure time and energy to afford to buy and ride it. Under the influence of the physiological comparison of the human body with a thermodynamic engine, the new vehicle was extolled as a very efficient device for converting physical energy into movement. Serving simultaneously as rider, engine and passenger, cyclists were in complete control of their vehicle, and in this respect it was extremely unlike using the other modern mode of transport, the train, which implied dependence on the railway system and its fixed schedules. The two-wheeled ‘freedom machine’ enabled flexible mobility at an unprecedented speed, surpassing the average pace of horses, and it thus involved not only a new experience of time and space, but also self-autonomy and a widening of one’s horizon. The first cyclists often described their experience in terms of flying, and by around 1900 some of them made long trips in Europe, America and even around the world.⁸

Early on bicycles were recommended as practical and cost-saving substitutes for the horse, and for this reason they were introduced in postal and wire services, police and fire departments, and the army. The first civilian cyclists, however, used them for sporting and recreational purposes rather than for utilitarian ones.⁹ Riding the velocipede and the high-wheeler, which was risky and required agility and courage, was considered by definition as a sport, in the sense of a physical outdoor leisure activity, whether or not involving competition and speed records. Before the introduction of the safety model, pedalling on high-wheelers was largely restricted to athletic and daring young men. For them, showing off their bravery and virility added to the attraction of this macho ‘danger-machine’. The not-so-fearless wheeling enthusiasts pedalled on safer and physically less demanding tricycles and quadricycles. However, these vehicles were even more expensive and exclusive than the two-wheeled ones, and their effectiveness was limited because they required smooth roads, which were rare.

Against the backdrop of the popular enthusiasm for spectacle, speed, performance, and time and distance records, the image and engineering of the bicycle were intrinsically linked to competitive racing. The first (long-distance) races were staged in France as early as the late 1860s, shortly after the introduction of the velocipede. Cycle racing, on special indoor and outdoor tracks as well as on public roads, which put the body’s endurance on trial, was the first commercialized and media-covered mass spectator sport.

⁷G. Norcliffe, *The Ride to Modernity: The Bicycle in Canada, 1869–1900* (Toronto, 2001).

⁸D. R. Jamieson, ‘Bicycle touring in the late nineteenth century’, *Cycle History*, 12 (2002), 68–75.

⁹J. Fitzpatrick, *The Bicycle in Wartime* (Washington, 1998).

Bicycle manufacturers and newspapers organized and sponsored races in order to attract customers and subscribers. Seasonal bicycle races, organized on a local and also national and international scale, replaced or were integrated into more traditional community entertainment.¹⁰

When the more comfortable and secure safety model, equipped with pneumatic tyres, came on to the market in the 1890s, the appeal and accessibility of cycling was broadened to new groups, including women and older men. Their use of the new vehicle was mainly recreational: touring in the countryside and enjoying nature. The popularity of bicycle tourism among townsfolk contributed to rural modernization because it stimulated infrastructural improvements along popular routes and the spread of facilities such as inns, cafés, information points and repair shops. Touring was a product of dynamic urban modernity, but at the same time it was also viewed as a counterbalance to the supposedly harmful and unhealthy side of industrial towns: the hustle and bustle, pollution and noise, and the standardized rhythms and (increasingly sedentary) routines of office and factory labour.¹¹ The use of the bicycle as an 'escape-machine' reflected and fostered a growing anxiety about individual as well as collective health. This mode of locomotion, combining physical exercise and mental relaxation, would strengthen and revitalize the body and counter modern ailments such as fatigue and nervous exhaustion. Although in medical debates the possible drawbacks of pedalling, especially for women, were mentioned, in general its health benefits were highlighted.

In the late nineteenth century bicycling was celebrated in terms of personal liberation, but at the same time it involved an organized activity rather than an individual one. Socializing was generally the initial purpose of the first local bicycle clubs which sprang up from the 1870s onwards, but soon these local affiliations and even more the national associations in which many of them joined their forces, were also engaged in lobbying in order to defend their interests. The first riders had to fight for acceptance by the authorities, which impeded their freedom of movement and even suppressed cycling within municipalities. Highways had been neglected since the train had largely replaced long-distance road transport. Bicycling also provoked conflicts with pedestrians and coachmen, who were annoyed by the new vehicle, and with rural folk who viewed tourists as arrogant intruders. Cycling advocates insisted on the civil right of free mobility and riding on public roads. As members of the social and political elite, many of them were well connected and knew how to be heard in government circles. Cycling organizations, which were part of civil society and were supported by cash-rich bicycle manufacturers, influenced the specific ways in which the new vehicle became established, including its public image and practical use. They played a crucial role in the improvement of highways, signposting, the standardization of traffic rules and road-mapping as well as in the transformation of streets from public spaces for

¹⁰R. Rabenstein, *Radsport und Gesellschaft: ihre sozialgeschichtlichen Zusammenhänge in der Zeit von 1867 bis 1914* (Hildesheim, Munich and Zurich, 1995); K. Ebert, 'Zwischen "Radreiten" und "Kraftmaschine". Der bürgerliche Radsport am Ende des 19. Jahrhundert', *Werkstatt Geschichte*, 44 (2007), 27–45; A. Ritchie, *Quest for Speed. A History of Early Bicycle Racing, 1868–1903* (El Cerrito, 2011).

¹¹G. A. Tobin, 'The bicycle boom of the 1890s: the development of private transportation and the birth of the modern tourist', *Journal of Popular Culture*, 7 (1974), 838–49; R. Holt, 'The bicycle, the bourgeoisie and the discovery of rural France, 1880–1914', *British Journal of Sports History*, 2, 2 (1984), 127–39; C. Bertho-Lavenir, *La Roue et le Stylo. Comment nous sommes devenus touristes* (Paris, 1999); C. Thompson, 'Bicycling, class and the politics of leisure in belle époque France' in R. Koshar (ed.), *Histories of Leisure* (Oxford, 2002), 131–46.

different activities (walking, pulling handcarts, lingering, chatting, trading, playing and herding cattle) into arteries for unhampered movement and transport.¹²

At the same time cycling associations, in their striving for public acknowledgement, incited their members to distinguish themselves as reasonable and self-disciplined traffic participants and law-abiding citizens. The proper art of cycling could be learned in riding schools, which sprang up in cities all over Europe and North America. Appearance – the appropriate posture, attire, pace and riding behaviour – was a major issue. The individual freedom afforded by the bicycle should be embedded in self-discipline, decency and social responsibility. On a two-wheeler citizens could be part of modernity's dynamism, while at the same time, by keeping their balance and mastering the vehicle, control its disruptive restlessness and experience inner tranquillity. Cycling was praised not only as healthy physical exercise, but also as an activity that trained mental qualities such as alertness, concentration, prudence, equanimity, stamina and willpower.

The tension between liberation and social conformity also throws light on how the adoption of bicycling among middle-class women, a theme discussed in many historical studies, can be understood.¹³ Some authors argue that the two-wheeler significantly enlarged women's freedom of movement, thus breaking down their social isolation and enabling more informal forms of interaction. Also, engaging in this sporting activity would have loosened the constrictive dress codes for women and improved their health. Others, however, qualify the emancipatory role of bicycling. In general women remained a minority among middle-class cyclists and many of them only rode in the company of husbands or male relatives. These wives and daughters did not so much cycle for themselves as for representative purposes: to demonstrate the distinction, conspicuous consumption and guardianship of bourgeois men. Bicycling involved seeing and being seen, and therefore cycling women could not escape being submitted to the male gaze. For men, physical activity in public was hardly an issue and rather worked in their favour, but for respectable women it was a sensitive concern. Since some independent cycling women, with their liberated attitude and daring outfits (including 'bloomers'), provoked disapproval, the majority of bourgeois women exercised caution and

¹²L. Bowerman, 'Clubs: their part in the study of cycles and cycling history', *Cycle History*, 5 (1995), 133–8; C. Bertho-Lavenir, 'Normes de comportement et contrôle de l'espace: le Touring Club de Belgique avant 1914', *Le Mouvement Social*, 178 (1997), 69–87; A. Poyer, *Les premiers temps des vélo-clubs. Apparition et diffusion du cyclisme associative français entre 1867 et 1914* (Paris, 2003); T. Burr, 'National cycling organizations in Britain, France, and the United States, 1875–1905', *Cycle History*, 18 (2008), 34–42; G. Norcliffe, 'Associations, modernity and the insider-citizens of a Victorian high-wheel bicycle club', *Journal of Historical Sociology*, 19, 2 (2006), 121–50; N. Stellner, *Radfahrervereine in der bayerischen Provinz. Raum Mühldorf/Altötting 1882–1994* (Regensburg, 2000); M. Killiainen, 'Cycling towards civil society: Estonian cycling history in the 19th century', *Cycle History*, 21 (2012), 71–9; G. Norcliffe and R. Miller, 'Defining a nation: the rise of the Canadian Wheelmen', *Cycle History*, 23 (2013), 110–21; Reid, *Roads were not Built for Cars*, 123–33, 143–58, 173–82.

¹³P. Marks, *Bicycles, Bangs, and Bloomers: The New Woman in the Popular Press* (Lexington, KY, 1990); N. Oddy, 'The bicycle: an exercise in gendered design', *Cycle History*, 5 (1995), 37–44; R. D. Petty, 'Women and the wheel', *Cycle History*, 7 (1997), 112–33; C. S. Thompson, 'Corps, sexe et bicyclette' in C. Bertho-Lavenir and O. Vallet (eds), *La bicyclette* (Paris, 1998), 59–67; B. Edwards, 'The cycling New Woman: the representation of the cycling New Woman in the English popular press, 1895–1897', *Cycle History*, 8 (1998), 67–74; D. Bleckmann, *Wehe wenn sie losgelassen! Über die Anfänge des Frauenradfahrens in Deutschland* (Leipzig, 1999); P. G. Mackintosh and G. Norcliffe, 'Men, women and the bicycle: gender and social geography of cycling in the late 19th century' in Cox, Horton and Rosen (eds), *Cycling and Society*, 153–77; A. Opmeer, 'Wat men ook zegt, zij fietsen toch: de betekenis van de fiets op het gebied van sport, vervoer, recreatie en emancipatie voor de Nederlandse vrouw tot 1940' (Utrecht, 2004); C. Thompson, 'Un troisième sexe? Les bougeoisies et la bicyclette dans la France fin de siècle', *Le Mouvement Social*, 192 (2000), 9–39; P. Mackintosh and G. Norcliffe, 'Flâneurie on bicycles: acquiescence to women in public in the 1890s', *The Canadian Geographer*, 50, 1 (2006), 17–37; A.-K. Ebert, 'Liberating technologies? Of bicycles, balance and the "New Woman" in the 1890s', *ICON: Journal of the International Committee for the History of Technology*, 16 (2010), 25–52; P. Cox, 'Women, gendered roles, domesticity and cycling in Britain, 1930–1980' in P. Cox (ed.), *Cycling Cultures* (Chester, 2015), 174–202.

adapted to prevailing gender role patterns. Pedalling on machines that were geared to the appropriate attire for ladies, they developed a specific feminine riding style that met the prevailing standards of elegance and decency. Moreover, the women's movement did not explicitly deploy bicycling in its emancipation struggle, in which suffrage and paid labour had priority. That cycling women were associated with militant feminism and manliness was largely a matter of public image, one that was disseminated by the media and by opponents of women on bicycles.

The activities of wheeling organizations in many western countries reflected not only the values of liberal citizenship and bourgeois respectability, but also nationalist aspirations. Their campaigns for more and better roads, bicycle routes and paths, the elimination of barriers such as tolls, standardized traffic rules and signposting, served the cause of national integration. The way they promoted and organized bicycle touring – propagating the discovery of national landscapes, the unspoiled, 'traditional' countryside and national heritage, as well as bringing town and countryside and different regions closer together – was imbued with nationalist self-esteem. Also, bicycle shows and parades, which were geared to the popularity of 'artistic cycling,' became part of nationalist celebrations. Since wheeling organizations aspired to official recognition by government authorities, it was no coincidence that they pointed to the bike's military potential and, more generally, employed nationalist rhetoric and imagery. The Dutch Wheelers Association, for example, called on its younger members to volunteer in the army in order to demonstrate the two-wheeler's military usefulness. In the early days of bicycling the comparison to horse riding, including military cavalry, was obvious, and this association was demonstrated in attire, codes of conduct, ranks, salutation, the blowing of horns, the singing of club songs and driving practice. It was not unusual that members of cycling associations wore uniforms and rode in formation during their tours and festive parades in order to present themselves as loyal and patriotic citizens.

In some countries bicycling was instilled with national values in a more fundamental and lasting way. In the early twentieth century the Netherlands and Denmark came to be regarded by their own populations, as well as others, as cycling nations par excellence – in 1938 a major Dutch newspaper characterized the vehicle as 'the most patriotic of all means of transport' – while in France, Belgium and Italy cycle racing became a source of national pride.¹⁴ In contrast, in the English-speaking countries, Germany and most other western nations the two-wheeler did not evolve as a vehicle of national pride and distinctiveness, although not only the French, but also the British and Germans claimed the invention of the machine as their national achievement (which involved the necessary myth-making). Britain, together with France, set the tone in bicycle engineering and manufacturing, and also showed the way for the organization of cycle clubs and for wheeling as amateur sports.¹⁵ To understand how the contrasts between countries resulted in different bicycle cultures, the twentieth-century history of cycling in national contexts is highly relevant.

¹⁴M. Stoffers, 'Exoot wordt icoon: de inburgering van de fiets. Van gewild buitenlands product naar nationaal vervoermiddel' in K. Hanenbergh and M. Röben (eds), *Ons stalen ros. Nederland wordt een land van fietsers 1820 tot 1920* (Utrecht, 2015), 290–9, quotation at 291.

¹⁵See J. Seray, *Deux Roues. La véritable histoire du vélo* (Rodez, 1988), 19, 26, 46–7, 83, 112; Hadland and Lessing, *Bicycle Design*, 45–53.

The downgrading of cycling

Until the early twentieth century bicycle production still involved a lot of handicraft. The vehicles were expensive and stylish luxury items with which their owners wanted to be seen: a typical example of conspicuous consumption. After 1900 ever more efficient mass production of standardized safety models, as well as the wider availability of second-hand bicycles, caused rapidly dropping prices and their widespread adoption for daily utilitarian purposes. The bicycle enabled a longer distance between home and work, and thus contributed to suburbanization. Traders, shopkeepers and artisans used them to transport goods or offer their services. In the countryside they advanced the opening up of isolated settlements: schooling and dating opportunities broadened, distant relatives and friends as well as new consumption options came within reach, and participation in social and club life on a regional and even national scale was facilitated. In some countries, the bicycle was employed to bridge long distances in sparsely populated and barren areas for economic purposes, for example in Sweden's northern forest regions and Australia's western territories during the big gold rush.¹⁶

As long as cycling was new and special, stylish and full of thrills, its development was generally similar in different parts of the western world. When, in the first three decades of the twentieth century, the vehicle became affordable for the lower classes and cycling turned into a commonplace practice, national differences surfaced in its public image and, in the longer run, also in cycling patterns and levels, which have left their mark to this day. These differences originated in (1) the diverging effects of the rise of motoring; (2) the ensuing traffic policies implemented by governments; (3) the association of class and status distinctions with car driving versus cycling; (4) bicycle organizations' responses to these developments; and (5) their varying standpoints vis-à-vis professional cycle racing.

In several western countries increasing utilitarian bicycle use by the working classes entailed a decline in the social status of cycling. In Germany and Britain, for example, where class and status distinctions were marked, the aristocracy and bourgeoisie increasingly turned their backs on the vehicle and exchanged it for the motorcycle and the car in order to distinguish themselves from the pedalling masses. At the same time, the advocates of motoring ignored the path-breaking contribution of cycling to the modernization of mobility, which benefited car drivers. They preferred to forget that the technology of the first cars depended on bicycle engineering, that many pioneering motorists had been ardent cyclists themselves, and that the views and interests of both groups were similar.¹⁷ The image of the bicycle as the embodiment of modernity in transportation was eclipsed by motorized traffic, although between the First World War and the mid-1950s in European countries the volume of cycle traffic was greater than ever before (and after) and far outstripped that of automobiles.¹⁸ All the same, membership of middle-class cycling associations began to drop, while at the same time they excluded or did not appeal to the lower classes. The

¹⁶T. Männistö-Funk, 'The prime, decline, and recalling of rural cycling: bicycle practices in 1920s and 1930s Finland remembered in 1971–1972', *Transfers*, 2, 2 (2012), 49–69; A.-M. Rautio and L. Östlund, '“Starvation strings” and the public good. Development of a Swedish bike trail network in the early twentieth century', *Journal of Transport History*, 33, 1 (2012), 42–63; J. Fitzpatrick, *Wheeling Matilda. The Story of Australian Cycling* (Kilcoy, 2013).

¹⁷Reid, *Roads were not Built for Cars*, 183–242.

¹⁸K. Hodges, 'Did the emergence of the automobile end the bicycle boom?', *Cycle History*, 4 (1994), 39–42; C. G. Pooley, J. Turnbull and M. Adams, *A Mobile Century? Changes in Everyday Mobility in Britain in the Twentieth Century* (Aldershot, 2005); N. Lefevre, 'Popularité du cyclisme et cyclisme populaire: pour en finir avec le mythe et le misérabilisme', *Cycle History*, 23 (2013), 91–109; Stoffers and Ebert, 'New directions in cycling research'; Reid, *Roads were not Built for Cars*, 249–50.

vast majority of utilitarian riders were not affiliated, although German, British and Italian workers established their own cycling organizations, in which the bike was regularly put into action for the socialist cause.¹⁹ As a consequence, the cycle lobby became hampered by organizational and ideological fragmentation, while at the same time the bicycle was increasingly viewed as typically lower class – as a ‘humble utensil’.²⁰

From the late nineteenth century onwards, pressure groups of upper- and middle-class cyclists had lobbied successfully for innovations in traffic infrastructure and regulations. When driving started to grow after the First World War, governments intensified their interference in transport and urban planning, and experts gained influence in policies at the expense of laymen such as cycle lobbyists. The modernist, forward-looking traffic planning creed prioritized the facilitation of motorized vehicles and the construction of public transport networks. Policymakers, urban planners and traffic engineers considered motoring as technological and economic progress and bicycle transportation as inferior, outdated, slow and unsafe – as an impediment to the efficient and fast circulation of traffic. Government policies in the English-speaking countries, and to a lesser extent also in Germany, had already forced cyclists on the defensive before the Second World War.²¹ In the United States the automobile, boosted by Fordism, made its advance as a mass product as early as the 1920s. The marginalization of bicycling thus occurred even earlier and more rapidly than in European countries. Already in the 1930s American cycle levels were much lower than European ones. Driving a car became part of the American identity and the bicycle was viewed as a means of transportation for losers and eccentrics, or for those with no status to lose such as youngsters and students.²²

In Europe cycling was not so much affected by the actual numbers of cars on the roads, which were still relatively low in most countries until the 1950s, but it was downgraded by the idea, fostered in traffic policies and urban planning, that motoring had replaced cycling as the avant-garde mode of transportation. Moreover, because in general cyclists, unlike motorists, did not pay taxes for road use and they were often pictured as undisciplined and a nuisance to motorized traffic, their interest groups were no match for the car lobby, in particular in countries with large-scale automobile industries. If the economic crisis of the 1930s and the hardships during and after the Second World War added to massive bicycle use, from the 1950s onwards growing prosperity furthered car ownership and driving, while post-war traffic policies cleared the way for the dominance of motoring on the roads.

¹⁹R. Beduhn and J. Klocksin (eds), *Rad-Kultur-Bewegung. 100 Jahre rund ums Rad: Rad- und Kraftfahrerbund Solidarität. Illustrierte Geschichte 1896–1996* (Essen, 1995); Rabenstein, *Radsport und Gesellschaft*, 178–98; D. Pye, *Fellowship is Life: The Story of the Clarion Cycling Club* (Bolton, 2004); S. Pivato, ‘The bicycle as a political symbol: Italy, 1885–1955’, *International Journal of the History of Sport*, 7 (1990), 172–87; C. Mari, ‘Putting the Italians on bicycles: marketing at Bianchi, 1885–1955’, *Journal of Historical Research in Marketing*, 7, 1 (2015), 133–58.

²⁰Fitzpatrick, *Wheeling Matilda*, 88.

²¹D. L. Patton, ‘Aspects of a historical geography of technology: a study of cycling, 1919–1939’, *Cycle History*, 5 (1995), 21–8; B. Horn, ‘Geschichte der städtischen Radverkehrsplanung’ in T. Bracher et al. (eds), *Handbuch der kommunalen Verkehrsplanung* (Berlin, 2002), chap. 2.1.1.2; M. Emanuel, ‘Understanding conditions for bicycle traffic through historical inquiry: the case of Stockholm’, *Urban Transport Journal*, December (2010), 1–16; R. Oldenziel and A. Albert de la Bruhèze, ‘Contested spaces. Bicycle lanes in urban Europe, 1900–1995’, *Transfers*, 1, 2 (2011), 29–49; M. Emanuel, ‘Constructing the cyclist. Ideology and representations in urban traffic planning in Stockholm, 1930–1970’, *Journal of Transport History*, 33, 1 (2012), 67–91; P. Cox, ‘“A denial of our boasted civilization”: cyclists’ views on conflicts over road use in Britain, 1926–1935’, *Transfers*, 2, 3 (2012), 4–30; Koglin, *Vélobility*; T. Koglin and T. Rye, ‘The marginalization of bicycling in modernist urban transport planning’, *Journal of Transport and Health*, 1 (2014), 214–22.

²²E. Friss, ‘The path not taken: the rise of America’s cycle paths and the fall of urban cycling’, *Cycle History*, 20 (2010), 67–72; Herlihy, *Bicycle*, 298–305, 322–36; Dodge, *The Bicycle*, 180; J. Forester, ‘American cycling history from the 1940s; as I remember it’, <http://www.johnforester.com/Articles/Social/My%20History.htm> (accessed 9 April 2016).

Functional differentiation in urban planning and urban sprawl entailed increases in the number and distance of daily trips. Again cycling lost social status, now also among the working classes: those without a driver's licence or who could not afford a car (the lowest income groups, youngsters, students, women and non-western immigrants) merely cycled out of sheer necessity. As users of the 'poor man's vehicle', these groups had no voice in traffic policies and urban planning.²³

In some countries, such as Germany and to a lesser extent also Britain and the United States, bicycle paths were already planned and sometimes built before the Second World War, but only locally and not systematically. Moreover, they were generally poorly constructed, too narrow, incomplete, and not direct and continuous. Officially cycling tracks served the safety and convenience of cyclists, but it was no secret that the main purpose, backed up by governmental authorities, planners, police and motoring organizations, was to remove them from highways and make room for motorized traffic.²⁴ In the Anglo-Saxon world the construction of cycling infrastructure was half-hearted, ironically in part because bicycle rights advocates opposed it. They feared that separated facilities, even if they were incomplete, implied the suggestion that cyclists did not belong on regular roads and should be banned from them. Bicycle ways would not be in the interests of the convenience and safety of cyclists, but rather serve the facilitation and speeding up of motorized traffic. English cycle associations argued that cyclists should be considered as drivers of a vehicle and that, as such, like motorists, they had the full right to use public roads. The argument that cyclists should be enabled to share the regular roads with motorists on the basis of mutual recognition – so-called vehicular cycling – is still current in Britain and the United States. Although vehicular cycling was controversial among bicycle activists, and several of them advocated segregated facilities, policymakers adopted it because this approach took the least effort and was cheapest.²⁵ As the volume and speed of motorized traffic on the roads kept increasing, however, vehicular cycling came with the unintended consequence of a growing preoccupation with danger. This caused more and more people to abandon cycling for daily transport; only a minority of strongly motivated and experienced cyclists were not going to be put off by its (real or alleged) risks.

The democratization of cycling

The twentieth-century Dutch and Danish development of bicycling markedly differed from that in other countries. Already, around the First World War, the Netherlands was seen as a cycling country par excellence by Dutch and foreigners alike, and in Denmark the bicycle became a national symbol from the 1920s onwards. As Anne-Katrin Ebert, Til Koglin and

²³T. Fläschner, 'Out of date, out of mind. Public awareness of the bicycle during the 1950s in Germany's Saarland State', *Cycle History*, 13 (2003), 46–50.

²⁴V. Briese, 'From cycling lanes to compulsory bike path: bicycle path construction in Germany, 1897–1940', *Cycle History*, 5 (1995), 123–8; J. Bonham and P. Cox, 'The disruptive traveller? A Foucauldian analysis of cycleways', *Road and Transport Research*, 19, 2 (2010), 42–53; L. Golbuff and R. Aldred, *Cycling Policy in the UK: A Thematic and Historical Overview* (London, 2011); A.-K. Ebert, 'When cycling gets political. Building cycling paths in Germany and the Netherlands 1910–40', *Journal of Transport History*, 33, 1 (2012), 115–37; Reid, *Roads were not Built for Cars*, 159–72.

²⁵J. Forester, 'Objective and psychological explanations for differences in the bicycling programs of different nations' in R. Boivin and J.-F. Pronovost (eds), *The Bicycle: Global Perspectives. Papers Presented at the Conference Vélo Mondiale – Pro Bike – Vélo City Montreal*, 13–17 September 1992 (Québec, 1992), 434–7; J. Forester, 'Ideas in motion: the bicycle transportation controversy', *Transportation Quarterly*, 55, 2 (2001), 7–18; B. D. Epperson, 'The Great Schism: federal bicycle safety regulation and the unraveling of American bicycle planning', *Transportation Law Journal*, 37, 2 (2010), 73–118.

other scholars have demonstrated, the vehicle's establishment as a widely shared means of transportation and its lasting popularity in both countries was not so much, or at least not only, related to – as common sense would have it – favourable geographical and spatial conditions (minor or no differences in elevation, relatively short distances, high levels of urbanization and compact historical towns). Indeed, their cycling levels hardly diverged from their neighbouring countries until the 1950s. Rather, these authors suggest that it was the socio-political meaning attached to cycling that made the difference.²⁶

The influential National Dutch Wheelers' Association, founded in 1883, steadily presented bicycling in terms of supposedly ingrained Dutch qualities and civil virtues, such as independence, self-control, modesty and stability. The 'Dutchness' of cycling was stressed by comparing it with the venerable tradition of ice-skating. At the same time the liberal and national-minded bourgeois citizens who were in charge of the association distanced themselves from commercial cycle racing. In their view it was vulgar and indecent, and undermined the image of cyclists as respectable and responsible road users. This position was reflected in government policies: road cycling races became rare as a consequence of prohibitive rules in a traffic law adopted in 1905. Touring, on the other hand, and also utilitarian cycling were actively promoted. When the bicycle came within reach of the population at large, the association advocated it as a widely accessible and egalitarian means of transportation – 'the democratic horse' as an official phrased it – that would bring progress for all ranks of society.²⁷ The vehicle's diffusion among the working classes would advance their elevation as civilized citizens and their integration into the nation.

Until the First World War the overwhelming majority of bicycles on Dutch roads were foreign imports, but domestic production soared in the 1920s and from then on the Dutch bicycle industry virtually monopolized the national market. Dutch producers did not contribute to technological innovations, but they did shape the design of the typical Dutch bicycle. Whereas elsewhere models were often geared to sports and racing, in the Netherlands the high-framed, solid and sturdy type of bike, usually soberly black and with a luggage carrier, chain-guard, dress-guards and lighting, became standard. The *Hollandrad* [Dutch two-wheeler], as Germans still refer to this model, was not only tailored to practical needs and everyday use, but also reflected the prevailing social norms. This machine, accessible for anyone with a reasonable physical condition, whether young or old, male or female, was not meant to break speed records or require its rider to dress in sports clothing, lean forward and break into a sweat. Rather, it was designed to be ridden neatly upright, serenely and in decent clothes, in line with standards of propriety. Dutch manufacturers and traders also underlined the established national image of the vehicle in their advertising, as Manuel Stoffers has shown. In contrast with the advertising imagery in other countries, associations with speed, lightness and flying (as well as with eroticism in advertisements

²⁶Ebert, *Radelnde Nationen*; see also A.-K. Ebert, 'Cycling towards the nation: the use of the bicycle in Germany and the Netherlands, 1880–1940', *European Review of History* 11, 3 (2004), 347–64; A.-K. Ebert, 'Het "paard der democratie". Fatsoenlijk fietsen in Nederland, 1900–1920' in C. Smit (ed.), *Fatsoenlijk vertier. Deugdzaam ontspanning voor arbeiders na 1870* (Amsterdam, 2008), 209–37; F. C. A. Veraart, 'Geschiedenis van de fiets in Nederland 1870–1940. Van sportmiddel naar massavervoermiddel' (Masters thesis, Technische Universiteit Eindhoven, 1995); A. A. Albert de la Bruhèze and F. C. A. Veraart, *Fietsverkeer in praktijk en beleid in de twintigste eeuw* (The Hague, 1999); T. Carstensen and A.-K. Ebert, 'Cycling cultures in northern Europe: from "golden age" to "renaissance"' in J. Parkin (ed.), *Cycling and Sustainability* (Bingley, 2012), 23–58; Koglin, *Vélocité*; P. Jordan, *In the City of Bikes: The Story of the Amsterdam Cyclist* (New York, 2013); P. Pelzer, 'Bicycling as a Way of Life. A Comparative Case Study of Bicycle Culture in Portland and Amsterdam' (Masters thesis, Metropolitan Studies, University of Amsterdam, 2010); Hanenbergh and Röben, *Ons stalen ros*.

²⁷Ebert, 'Het "paard der democratie"', 236.

featuring images of women) were rare in Dutch bicycle marketing. Neither did sportiness, racing, technical novelty or fashion figure prominently. Advertising images and rhetoric expressed the embeddedness of cycling in the national past. Cyclists were depicted against the background of typical Dutch landscapes (including windmills) and historical towns, folk wearing traditional costumes, and accompanied by the red, white and blue of the Dutch flag and the lion of the national coat of arms. Brand names (such as Batavus, Rembrandt and Transvalia) were taken from icons of national pride.²⁸

The approach of Danish bicycle organizations, founded in 1881 and 1905, was similar to that of the Dutch association. They pushed cycle racing into the background, were involved in the construction of cycle paths and focused on touring. Unlike the German, British and American bicycle lobbies, which were divided along class lines and across different cycling practices (sports versus utilitarian use and touring, as well as the English ideal of disinterested gentleman-amateur sportiness versus professional and commercial racing), the Dutch and Danish associations spoke with one voice and could boast that they represented the interests of all cyclists in the country. Contrary to German and British socialist workers, the Dutch and Danish labour movements did not develop a distinct ideological vision on cycling. Working-class attitudes were largely in line with the national and civic values (practicality, modesty, simplicity, level-headedness and diligence) propagated by the middle-class wheeling lobby. In both countries the view prevailed of the bike as a practical means of transportation for people from all walks of life and as a civilizing and assimilating tool. In this way the bicycle was moulded into a vehicle of national identity, while at the same time cycle racing did not incite national pride, as happened in France, Italy and Belgium.

As the studies of the Netherlands and Denmark suggest, the enduring ubiquity and popularity of the bicycle and the specific riding style in these countries – characterized by a Dutch sociologist as ‘distinction through simplicity’ – was and is related to the egalitarian social ethos and distaste for showing off.²⁹ This is underlined by the fact that Dutch royals and cabinet ministers have regularly appeared in public on bicycles. In Denmark images of pedalling women in particular linked cycling with liberal attitudes, emancipation and equality. During the First and Second World Wars, in particular, cycling was connected to qualities through which the Dutch and Danish nations supposedly distinguished themselves from the belligerent nations and especially from Germany, which was depicted as authoritarian, hierarchical, militaristic and hyper-masculine.

In the mid-1930s half of Dutch people owned a bicycle, a density that was only surpassed by the Danish.³⁰ In both nations the growth of motoring was slower than in other parts of the western world, partly because there was no large automobile industry (unlike in their neighbouring countries, Germany and Sweden) and car driving was heavily taxed.³¹ While from the 1950s onwards daily bicycle use strongly decreased in most western countries, in the Netherlands and Denmark the drop was not as steep and cycling levels remained relatively high. Again, the course of the Dutch and Danish bicycle associations and government policies

²⁸*ibid.*, 223–4; S.-Y. Tjong Tjin Tai, ‘Hoe werd de fiets een Nederlands product? Hollandse degelijkheid vormt de fiets voor dagelijks gebruik’ in Hanenbergh and Röben, *Ons stalen ros*, 192–7; Stoffers, ‘Exoot wordt icoon’.

²⁹G. Kuipers, ‘The rise and decline of national habitus: Dutch cycling culture and the shaping of national similarity’, *European Journal of Social Theory*, 16, 1 (2013), 17–35, quotation at 24.

³⁰Herlihy, *Bicycle*, 322–8; P. E. Staal, *Automobilisme in Nederland. Een geschiedenis van gebruik, misbruik en nut* (Zutphen 2003), 115.

³¹V. van der Vinne, *De trage verbreiding van de auto in Nederland 1896–1939* (Amsterdam, 2007); Koglin, *Vélocity*.

played a major part. Whereas in other countries cycling and motoring were increasingly framed as opposites, in the Netherlands and Denmark their complementary nature and shared interests with regard to traffic facilities were acknowledged, reflecting a substantial overlap of drivers and cyclists. Therefore the Dutch and Danish cycling organizations were able to influence government policies more effectively than their counterparts in countries where bicycle lobby groups were more marginalized and their middle-class leadership did not represent lower-class cyclists. From the early twentieth century onwards cycle paths were constructed in both countries, at first mostly for recreational touring, but increasingly also for utilitarian cycling. Although the Dutch and Danish governments did not conduct active policies to promote cycling until the 1970s, and car traffic grew rapidly from around 1960, cycling was not hampered and discouraged to the same extent as elsewhere. Working in a consensual political culture, traffic engineers and civil servants had an eye for the still substantial number of cyclists. The leftist bicycle activism which developed in the 1970s was in line with the self-evident definition of the bicycle as a sensible transport mode for all strata of the population. This explains why radical activists, like the established lobbyists earlier on, were soon involved in policymaking by local and national governments.

Three bicycle cultures

The twentieth-century developments in, on the one hand, the Netherlands and Denmark and, on the other, the English-speaking world and to a somewhat lesser extent Germany, have resulted in contrasting bicycle cultures. In the first two countries cycling is largely part of people's daily routine from an early age. The demographic characteristics of cyclists largely reflect those of the population at large and cycling is hardly associated with a particular alternative lifestyle or political viewpoint. Government and bicycle interest groups co-operate, and cycling policies are pragmatic and go virtually uncontested. Cyclists enjoy a high level of protection in traffic and cycling is not considered particularly dangerous. Apart from non-European immigrants, the Dutch and the Danes hardly need to be convinced of the usefulness and benefits of cycling.³²

In the United States, Britain, Canada and Australia, where the bicycle was pushed out by the car to a much greater extent than in most European countries, it is more frequently used for recreational and sporting than for utilitarian purposes. Bicycle policies, if existent at all, are contested and do not elicit broad support. For many people cycling is a typical childhood and youth experience at best. Younger men are strongly over-represented among riders, while women and the elderly are under-represented. In the public perception of utilitarian cycling, such negative valuations as abnormal, eccentric, inferior, unsafe, uncomfortable and (too) strenuous abound. Also, cycling is associated either with poverty and low social status (although in fact the well educated are over-represented) or with an exclusive 'lycra-and-helmet, sporty-and-skilled' and yuppie practice.³³ The relatively small minority of regular

³²Directorate-General for Passenger Transport, *The Dutch Bicycle Master Plan. Description and Evaluation in an Historical Context* (The Hague, 1999); Ministry of Transport, Public Works and Water Management, *Cycling in the Netherlands* (The Hague, 2006).

³³D. Horton and J. Parkin, 'Conclusion: towards a revolution in cycling' in Parkin, *Cycling and Sustainability*, 310; R. Aldred, 'The role of advocacy and activism' in Parkin, *Cycling and Sustainability*, 97; D. Horton, 'Fear of cycling' in Horton, Rosen and Cox, *Cycling and Society*, 133–52; R. Aldred, 'On the outside: constructing cycling citizenship', *Social and Cultural Geography*, 11, 1 (2010), 35–52; R. Aldred, 'Incompetent or too competent? Negotiating everyday cycling identities in a motor dominated society', *Mobilities*, 2, 8 (2013): 252–271.

cyclists not only share a strong sensitivity for bicycle-adverse conditions, but also great appreciation of and identification with their vehicle. Daily bicycle use is often inspired by pronounced motives, lifestyle choices and social criticism. In the United States, in particular, a politicized cycling movement and subculture have developed, which protests against the dominant car culture and the interrelated urban planning and economic interests.³⁴ In general, in the English-speaking countries, as in Germany, where cyclists and motorists are pitted against each other, a much more explicit reflection on the meaning and experience of cycling is prevalent than in the Netherlands and Denmark, where it is an ingrained habit without any need for discussion about its benefits.

Until the 1970s cycling patterns in Germany resembled those in the English-speaking world. Since the 1970s, however, German cycling levels have risen considerably, in part as a result of local cycling policies. At the same time the car, supported by an all-powerful industrial and automobile lobby, has absolute priority in traffic, while the bicycle infrastructure, which is geared to touring rather than daily cycling, lags far behind that in Denmark and the Netherlands.

Apart from the marked contrast between Denmark and the Netherlands on the one hand and the English-speaking countries, and to a lesser extent Germany, on the other, a third national bicycle culture can be distinguished, as suggested in studies of France and Belgium (by Hugh Dauncey and Stijn Knuts) as well as in Italy and Spain.³⁵ However, the nationalist dimension of cycling in these countries did not involve (as in Denmark and the Netherlands) utilitarian transport, which since the 1960s has declined to the same low levels as in many other parts of the western world, but was linked to sports and (professional) racing. Around 1900 there was considerable social resistance against competitive professional racing in the Netherlands, Denmark, Britain and Germany because most bicycle organizations in these countries not only followed the English sports ideal of the gentleman-amateur, but also prioritized touring and, later on, utilitarian cycling as well. Leading French, Belgian (Flemish as well as Walloon), Italian and Spanish cycling associations, on the other hand, embraced the bicycle as a record-breaker and promoted racing, which entailed the commercial involvement of the (sports) media and the bicycle industry.

In France, Belgium and Italy bourgeois bicycle lobbyists and entrepreneurs organized contests, whereas most of the professional racers increasingly originated from the working

³⁴Z. Furness, '“Put the Fun Between your Legs!” The Politics and Counterculture of the Bicycle' (Ph.D., University of Pittsburgh, 2005); J. H. Wray, *Pedal Power. The Quiet Rise of the Bicycle in American Public Life* (Boulder and London, 2008); J. Mapes, *Pedaling Revolution. How Cyclists Are Changing American Cities* (Corvallis, OR, 2009).

³⁵Dauncey, *French Cycling*; Knuts, *Converging and Competing Courses of Identity Construction*; S. Pivato, 'Italian cycling and the creation of a Catholic hero: the Bartali myth', *International Journal of the History of Sport*, 13 (1996), 128–38; R. J. B. Bosworth, 'The Touring Club Italiano and the nationalization of the Italian bourgeoisie', *European History Quarterly*, 27, 3 (1997), 371–410; H. Dauncey and G. Hare (eds), *The Tour de France: A Century of Sporting Structures, Meanings and Values* (London, 2003); J.-L. Boeuf and Y. Léonard, *La république du tour de France (1903–2003)* (Paris, 2003); C. S. Thompson, *The Tour de France: A Cultural History* (Berkeley, CA, 2006); D. Vanysacker, 'Le cyclisme en Wallonie jusqu'à la Seconde Guerre mondiale: une histoire sociale comparable à celle des Flandriens (1860–1945)' in L. Courtois et al. (eds), *Images et Paysages Mentaux des 19e et 20e siècles, de la Wallonie à l'outre-mer* (Louvain-la-Neuve, 2007), 147–72; Pivato, 'The bicycle as a political symbol: Italy, 1885–1955'; A. Cardozo, 'Making Italians? Cycling and national identity in Italy: 1900–1950', *Journal of Modern Italian Studies*, 15, 3 (2010), 354–77; B. López, 'The failed *Vuelta Ciclista a España* of 1913 and the launching of the *Volta a Catalunya* (1911–1913): centre versus periphery in the struggle for the governance of cycling in early twentieth-century Spain', *Sport in History*, 30, 4 (2010), 547–69; B. López, 'Sport, media, politics and nationalism on the eve of the Spanish Civil War: the first *Vuelta Ciclista a España*', *International Journal of the History of Sport*, 27, 4 (2010), 635–57; P. Cox, 'Strategies promoting cycle tourism in Belgium: practices and implications', *Tourism Planning and Development*, 9, 1 (2012), 25–39; F. Papon, 'The evolution of bicycle mobility in France', *Cycle History*, 22 (2012), 189–99; S. Gorostiza and E. Anaya, 'Under the shade of Bahamontes: bicycle decline in Spain between 1950 and 1975', *Cycle History*, 23 (2013), 63–70; E. Anaya and S. Gorostiza, 'The historiography of cycling mobility in Spain in the twentieth century', *Mobility in History*, 5 (2014), 37–42; Mari, 'Putting the Italians on bicycles'.

class; for them a cycling career offered an attractive opportunity to reap local, national or even international fame, make money and climb the social ladder. In the many local, regional, national and international contests, which managed to draw mass audiences, the achievements of native racing heroes were widely celebrated and associated with the nation's vitality. Annual highlights such as the long-distance and staged road races like the *Tour de France* (from 1903 onwards), *Giro d'Italia* (from 1909 onwards), the *Ronde van België* and the *Ronde van Vlaanderen* (Tours of Belgium, from 1906, and Flanders, from 1913) and the Spanish *Vuelta Ciclista* (from 1935) became national events and grew into cherished traditions, as underlined by the historical labelling of the French *Tour* as *lieu de mémoire*.³⁶ Since the participants crossed the entire country, the extensive media reports covered its geographic contours, inciting the spectators along the roads and the reading audience to identify with the nation. In Belgium bicycle racing was also instrumental in the emancipation struggle of the (lower-class) Flemish population against the dominant francophone upper and middle classes. Although socialists and communists criticized the commercialization of professional cycling and accused the organizers of exploiting working-class racers for capitalist purposes, the sport enjoyed broad popularity among the lower as well as the middle classes. With the exception of Flemish cycling trends, which have somewhat shifted towards Dutch and Danish patterns, the racing nations show low utilitarian cycling levels while their bicycle infrastructures and policies (with local exceptions) are lagging behind those of north-western and central European countries. The over-representation of men among cyclists and the strong presence of racing and all-terrain bikes in these countries signal a continuing strong association of the bicycle with sports.

Conclusion: the relevance of history for bicycle policies

The recent historical studies discussed above make clear that sensitivity to social class and status is crucial to explain twentieth-century developments in cycling in general and the emergence of contrasting national bicycle cultures in particular. The marginalization of cycling was triggered less by the actual number of cyclists (which was still high in many western nations until the 1950s) or of motorists (which generally remained relatively low until that decade) than by the changing image of the bicycle – from innovative and prestigious to obsolete and humble. Subsequently, and in most countries, policymakers, traffic engineers and urban planners, backed up by ever more powerful motoring interests and people simply wanting to drive cars, largely excluded cycling from their frame of reference. The result was that the growing numbers of cars, their speed and overpowering capacity, forced most cyclists off highways. In contrast, in the Netherlands and Denmark, with their strong egalitarian and more consensual ethos, class and status hardly mattered with respect to bicycling, whereas in countries with low cycling levels, social distinction continued to be relevant; if the bicycle is still regarded as the poor man's vehicle, it has regained popularity as 'cycle chic', as part of the trendy metropolitan lifestyle of young urban professionals. Both of these class- and status-related images hamper the acceptance of the bicycle as a mainstream mode of transport.

These historical insights are helpful, I would argue, to understand the international differences in both cycle levels and the outcome of bicycle policies up to this day. Apparently

³⁶G. Vigarello, 'Le Tour de France' in P. Nora (ed.), *Les lieux de mémoire*, 3 (Paris, 1992), 885–925.

these differences are largely rooted in diverse long-term national trajectories which have shaped the collective meanings attributed to cycling and the interrelated attitudes, experiences, habits and infrastructures – which is not to deny that there are also substantial local and regional differences within countries. In this way bicycle history brings up for discussion two crucial assumptions of contemporary bicycle policies and policy-oriented research: that cycling is a matter of individual, rational and instrumental choice and that it can be stimulated by technical and social engineering. In the perspective of many policymakers, planning experts and bicycle researchers, the main problem is that people who do not ride a bike are not aware of its benefits. They also seem to presume that people's decisions of whether or not to cycle are based on a reasoned consideration of costs and benefits, and that such a choice can be influenced by education and persuasion, by promoting a positive image of the bicycle, and in particular by putting in attractive infrastructural facilities. In this way of reasoning, cycling policy is a matter of implementing the appropriate measures based on technical expertise and sensible planning.

However, the often assumed causal link between infrastructural planning and promotional activities on the one hand and the volume of bicycle use on the other has not been confirmed. Policies have failed to generate substantial increases of utilitarian cycling in countries with low average levels, such as the English-speaking ones and also France, Italy and Spain, whereas in countries with relatively high cycling volumes such policies have contributed to their consolidation rather than to a further growth. More generally, the widely diverging national cycling patterns have hardly changed during the last two decades, even though quite similar policies have been introduced across the western world. Attempts to promote cycling, it seems, are impeded everywhere by structural factors, such as an ageing population, growing car ownership and driving, spatial upscaling and increasing mobility over greater distances. Above all, policymakers and policy-oriented researchers in the field of traffic engineering, infrastructure and urban planning do not take into account that history and culture put limits on what cycling policies can realize in the short run. Historical works on bicycling suggest that the effectiveness of policies largely depends on existing cycling patterns, the nature of bicycle use and the related *habitus* (ingrained behaviour), all of which are embedded in social-cultural and national contexts. Such historically evolved contexts are largely immune to rational considerations and direct, short-term technocratic design. In order to develop more realistic and effective policies, it may be wise to consider the historical and national specific interrelations between natural environments, infrastructures, patterns of urbanization, meanings and perceptions, and habits and attitudes with regard to cycling. The available historical studies offer interesting clues for bridging the gap between historical and policy-oriented research, while at the same time tempering the over-optimistic belief that bicycling can be planned.

Acknowledgments

I am indebted to André Strooper and my colleague Manuel Stoffers (Maastricht University) for sharing bibliographical information. Manuel Stoffers runs an online cycling history bibliography: www.fasos-research.nl/sts/cyclinghistory

Disclosure statement

No potential conflict of interest was reported by the author.