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Chapter 1

Introduction: changing cultures of speed

'There is more to life than simply increasing its speed'.

Mahatma Gandhi

Abstract

This chapter outlines the widespread acceptance of speed as a positive aspect of urban transport during the 20th century, along with a growing recognition in recent decades that speed may not provide the advantages that have long been assumed. In 21st century urban planning, no longer are higher speeds always seen as the main objective. New goals are increasingly recognised as being more important: accessibility, liveability, economic vitality, child-friendliness, sustainability and health. The concept of 'health' in this book applies to human health, as well as economic health and environmental health. We explain how all of these types of health can be enhanced using the simple strategy of slowing city transport. A brief history of increases in transport speed is followed by a discussion of the evolution of the culture of speed in modern societies, to a level that can be compared to an addiction. An important aspect of the culture of speed is the story of motordom, the grouping of automobile clubs, car dealers and car manufacturers that began in the United States in the 1920s. A concerted campaign by motordom comprehensively dismissed the public's negative views on speed. We then outline how, from the 1980s onwards, new thinking began to emerge about motorised city transport, in which the value of slowing it down became more widely discussed. We provide examples of various slow movements that have emerged since the 1980s. While some citizens and policy-makers may question (or even ridicule) the idea of slow movements, we reflect on where the 'fast movement' has taken us over the last 100 years. This chapter concludes with a preview of the chapters and parts of the book.

1.1 Introduction: a faster route to health

From the mid-1920s, after the motor car became the dominant transport mode in many cities, few people questioned whether speed was good or bad. They simply assumed that faster was always going to be better. City transport policy in the 20th century became concerned mainly with faster roads and increased parking for growing numbers of cars. The (supposedly) 'slower' modes of walking and cycling were denigrated as 'old fashioned' and were ignored in policy-making.

Over the last few decades, there has been a discernible change in city transport policy. Many policy-makers, planners, politicians and members of the public are reassessing the way they think about the role of cities. Their focus is moving away from the singular goal of promoting speed to new goals: accessibility, liveability, economic vitality, child-friendliness, sustainability and health. Increasing numbers of decision-makers are embracing the concept of ‘slow cities’ (see [Box 1.1](#)), which can help achieve all these goals.

BOX 1.1 What do we mean by ‘slow cities’?

In a society that values speed, ‘slow’ can be associated with pejorative synonyms such as lethargic, idle, indolent and slothful. We are not advocating cities that have these characteristics. Instead, we are thinking of the meaning of ‘slow’ in the sense of ‘lower speed’, which elicits synonyms such as ‘calm’, ‘careful’, ‘cautious’, ‘deliberate’, ‘leisurely’, ‘relaxed’, ‘measured’, ‘peaceful’ and ‘unhurried’. Our belief is that a city described in that way would have vibrant communities, living healthy and sustainable lives. Slowness in this sense is associated with several characteristics that are highly appreciated by people seeking a better quality of life, as explained in books such as *In Praise of Slow* ([Honoré, 2004](#)).

As this chapter outlines, ‘slow cities’ reflect the outcomes of two synergistic strategies: reducing the speed of motorised travel on the one hand and encouraging much greater use of walking, cycling and public transport on the other hand. The first of these strategies has already been implemented in large areas of many cities throughout the world, for example by implementing 30 km/h (or 20 mph) zones. Reducing motorised traffic speed supports efforts to increase walking, cycling and public transport in multiple ways, not least being the impact that lower speeds have on making streets safer and more pleasant for vulnerable road users. Six images that serve to illustrate these strategies are as follows (see [Fig. 1.1](#)):

- a. Nelson, New Zealand: A residential area reduces traffic speeds through lower posted speed limits and re-design as a shared space, with visual and physical encouragement provided by a raised entrance gateway.
- b. Stoke-on-Trent, United Kingdom: Unsigned traffic calming using a raised speed table at a junction, with psychological calming elements provided by different coloured and textured surfaces.
- c. Bowden, Adelaide, Australia: A model of a planned low-speed development, incorporating healthy land-use elements designed to deter fast car movement and support active travel, such as high densities, short blocks, cut throughs for people on foot and bicycle, shade and easy access to recreation and play space.
- d. Cambridge, MA, United States: Reducing traffic speeds by lowering the number and width of travel lanes, and re-allocating space in the roadway corridor in order to widen footways and add protected ‘Copenhagen style’ bicycle lanes.
- e. Calle Madero, Mexico City: Many cities have slowed central areas by pedestrianising streets. The results are usually popular and economically successful, but their reconstruction frequently encounters opposition, especially from

traders mistakenly fearing loss of business. After a long fight, Calle Madero was pedestrianised in 2010 and is now the second most economically successful street in Latin America. However, it should be stressed that a pedestrianised CBD does not make a 'slow city' if speeds are not reduced across the whole urban area.

- f. Houten, The Netherlands: While many places have some elements of city slowing, few have pursued them as systematically as this small city near Utrecht. Here, all of the approaches deployed in images A–E have been used (and many others besides) in an attempt to harness their synergistic benefits. This image shows the result that can be achieved when land-use planning, traffic management, infrastructure provision and promotion of the connections between public transport, cycling and walking are combined into a comprehensive policy.



FIGURE 1.1 Images referred to in [Box 1.1](#): (A) Nelson, New Zealand; (B) Stoke-on-Trent, United Kingdom; (C) Bowden, Adelaide, Australia; (D) Cambridge, MA, United States; (E) Calle Madero, Mexico City; and (F) Houten, The Netherlands. (Credit: All photos by Rodney Tolley)

Many of the arguments about slowing city transport systems already have strong appeal with audiences that have experienced the benefits of slowing down or living in areas where walking and cycling are safe, enjoyable and convenient. However, while there are encouraging signs of a change in transport planning paradigms, the culture of speed is still dominant amongst many city transport experts and policy-makers, including transport planners and modellers. Transport plans continue to use performance metrics where faster motor car speeds are the fundamental criterion for success (Proffitt, Bartholomew, Ewing, & Miller, 2019). The professional training of many transport planners and modellers has often involved learning how to use decision-making tools that supposedly demonstrate the benefits of speed, for example in saving time. These benefits are often illusory.

This book is written for an audience of planners, policy-makers, students and concerned citizens who have an interest in creating healthier places to live, work and play. We focus on the relationship between speed and health. Almost everyone sees an improvement in health as a worthwhile goal. Lists of the most important things that people value in their lives and their communities invariably include the topic of health. Any strategy that aims to promote health is likely to be widely welcomed by policy-makers, planners, traffic engineers, politicians and members of the public. A similar welcome is likely for any strategy to reduce a harmful addiction: in Chapter 2, we make the case that cities are currently addicted to speed and in Chapters 8–10 we outline approaches to conquering that addiction.

In our analysis of health, we adopt a broad view that recognises the separate but related dimensions of human, economic and environmental health. When thinking about health, people likely immediately consider the health of individuals: their physical, mental and emotional health. In addition, we also examine environmental health, which is critical for the other dimensions of health. If we examine environmental health at the global scale (e.g. ecological diversity and climate health), then we can include ‘planetary health’ in our analyses (Capon, Talley, & Horton, 2018). Finally, we consider economic health, which can be applied at different spatial scales: households (e.g. lower transport bills), neighbourhoods and businesses (e.g. higher retail turnover) and cities (e.g. lower infrastructure costs). We explain how all three types of health can be improved through the simple strategy of ‘slowing the city’. Throughout the book, when we use the term ‘slowing the city’ we are referring to the slowing of transport, rather than the slowing of the pace of life or any other type of slowing.

‘Slowing city transport’ as discussed here refers to slowing the speed of motorised vehicles, as well as encouraging the use of (supposedly) slower active modes: walking, cycling and public transport. These active modes are also the healthiest and most sustainable modes (Giles-Corti et al., 2016; Pucher & Buehler, 2017; Pucher, Buehler, Bassett, & Dannenberg, 2010). We include public transport as an ‘active’ mode because it usually involves some walking

or cycling before or after a bus, tram or train trip. We recognise that not all public transport is ‘slow’. In many cities trains have higher speeds than cars, and the global average ratio of metro/suburban rail speed to road speed has been steadily increasing over the last few decades (Newman, Kenworthy, & Glazebrook, 2013).

While we see public transport as an important part of ‘slow cities’, our main focus, particularly in Part 3 of the book (on strategies), is on walking and cycling. As we explain in more detail in Chapter 9, if the walking environment can be made more attractive, this increases the acceptable walking distances to public transport, and this can have a significant positive impact on its viability. We are also aware of the other side of this particular coin—that walking and cycling levels at trip ends can be increased by interventions in infrastructure, equipment and operational procedures that make public transport more attractive and increase patronage. However, discussion of how this might be achieved would necessarily be lengthy and would divert attention away from the core issues in ‘slow cities’. We support the approach of encouraging a mode shift to public transport, as this will help to promote the use of the ‘slower’ modes of walking and cycling: walking and cycling trips become more important as motorised transport becomes less orientated to cars.

Using examples from North, Central and South America, Europe, Asia, Africa and Australasia, the book explores the paradox that slowing city transport can save time and simultaneously improve the health of individuals, communities, cities, economies and the planet. ‘Slow cities’ may, indeed, provide a faster route to health and sustainability.

Our focus is on transport ‘within’ the city. We acknowledge that trends in inter-city transport, especially via air travel, also have concerning impacts on health and sustainability. However, rather than attempting a discussion of the slowing of aviation, we see this as the subject for a whole new book. The issues surrounding air travel are complex and sometimes different from the transport issues we examine in this book. For example, while demand management is now an accepted practice in city transport planning (see Chapter 10), it has as yet seen little application in aviation (Ryerson & Woodburn, 2014). Air travel also involves infrastructure that is often outside the control of urban and regional planners. Yet, the concept of slowing transport can, and we believe should, be applied to aviation. Not only could there be a slowing in the speeds of long-distance travel (e.g. through increased use of airships for cargo) there could also be a reduction in the total volume of air travel. A slowing of long-distance travel would be a more effective strategy for sustainability than efficiency improvements and new fuels in air travel (Higham & Hopkins, 2016). Other researchers have begun to address the importance of reducing the amount of air travel, and have shown how this could be achieved, even in Australia, a nation heavily dependent on aviation for international travel (Young, Markham, Higham, & Jenkins, 2017). However, our focus is on the importance of slowing city transport and how this can be achieved.

Our emphasis on transport does not mean that we discount the value of other types of slowing. Indeed, we would argue that many aspects of our economy and society would likely benefit from slowing. In [Section 1.8](#), we outline various slow movements that recognise the benefits of a slower approach to life, including slow parenting, slow sex, slow medicine, slow gardening, the Cittaslow slow cities movement, slow travel and slow thinking. Aspects of many of these are relevant to our discussion of slowing city transport.

1.2 Holistic perspectives on slowing city transport

For over two centuries there have been significant increases in the speed and distance of travel, both within cities and between them. There is a growing awareness that faster transport increases the level of energy use and carbon in travel. There is much less awareness that increasing speed often has perverse impacts on the goal of making cities more efficient. As we explain in Chapter 4, instead of reducing the time devoted to transport, increasing speed can actually increase it. One of the reasons for this is that as the speed of transport increases, the costs associated with transport also increase: ‘speed is not free’ ([Thackara, 2006](#), p. 31). When we factor in the time required to earn the money to pay for these costs, we can calculate the ‘effective speed’ of any mode of transport ([Tranter, 2012](#)). Effective speed considers not only the time spent moving, but also the total time costs of transport. Because the costs of faster modes (e.g. motor cars) are significantly higher than the costs of walking, cycling and public transport, the effective speeds of the ‘faster’ modes can be very low. The concept of effective speed helps individuals, policy-makers and planners to think differently about speed and the ways that transport systems are designed in cities.

Understanding the value of slowing the city requires a holistic assessment of the impact of speed on the daily behaviours and life choices of individuals and households, as well as the interaction between transport and land use, particularly the density of housing and the distribution of shops, services and schools. The impact of policies designed to increase the speed of travel within cities is much greater than transport planners sometimes appreciate. Speed has impacts on health, happiness, social interaction, wealth, property values, pollution, liveability and environmental quality. If our aim is to improve cities in all these dimensions, one important strategy may provide much of the solution: ‘slowing the city’, which includes slowing the speed of cars.

It is important to realise that any gains for health provided by slowing the speed of cars may be undermined by countervailing forces. Even if the speeds of motor cars can be significantly reduced, a continuing rise in the use of motor vehicles, encouraged by continued road building, would have multiple negative health impacts, which have been the subject of a wide body of research starting in the 1970s and growing in momentum ([Davis, 1994](#)). These negative impacts include road deaths, pollution, inactivity, obesity, noise, community severance and the health impacts of the climate crisis. Consequently, an important part of

the strategy of ‘slowing the city’ is the transfer of mobility from private motor vehicles to ‘slower’ modes, particularly walking and cycling, and also public transport.

It is important not to conflate two connected ideas, those of challenging car-centric planning and this book’s specific focus on reducing the ‘speed’ of motorised traffic in the city. Clearly, speed reduction requires tackling car-centric planning, but it needs much more besides. We use a health lens to focus on the benefits of a simultaneous application of the twin strategies of slowing the speed of existing vehicle traffic, and changing the modal split towards the ‘slower’ modes. Though both head towards the same goal, they are synergistic because it is not possible to significantly increase the use of the ‘slower’ modes unless existing and planned motorised traffic is also slowed.

The strategy of slowing the city will likely be increasingly relevant in future cities. Medium- and long-term changes in transport are likely to involve technologies such as on-demand autonomous electric vehicles, perhaps owned by fleets rather than individuals. There is a danger that an excessive focus on technological solutions to transport problems may simply promote the assumption that high-speed motor car transport should be the goal, ‘if only cars can be designed and operated differently’. We explain why a widespread introduction of new technologies should be used in ways that slow the city, rather than speed it up. We also explain how many of the problems created by high-speed city transport are unlikely to be solved by technology.

As well as looking to the future, it is important to understand the history of speed and slowness in society and in cities. There are two strands to consider here. First, we discuss the adoption of new technologies that led to increased speed of travel. Second, and perhaps more importantly, we examine the evolution of the culture of speed in modern societies.

1.3 Increasing speed: technological advances throughout history

As civilisation developed, humans invented new means to increase their speed of travel, including animal-powered devices (from around 5,000 BCE), and the wheel, or more precisely, the wheel and axle system, invented around 3,500 BCE. While there were advances in the speed of travel over water, on land the speed of travel using wheeled carts and animal power varied little until the introduction of the railway. Though some wheeled carts could travel faster than others (e.g. chariots and stagecoaches designed for speed), the difference between the speed of human travel (walking) and animal assisted transport in cities was only a few km/h.

Until the early 1800s, the speed of travel (and hence the distance travelled) was limited to walking (5 km/h) and horse riding (10 km/h) speeds. The arrival of the steam-powered railway in the 19th century, along with the use of fossil fuels, changed the speed of travel in an unprecedented way. Railways increased

speeds to over 40 km/h, and, as they developed, to over 100, then over 300 km/h with high-speed rail. While railways were initially used for travel between cities, they came into use for urban travel soon after. The world's first underground rail line opened in London in 1863. The railway transformed the speed of travel, yet the technology that did the most to promote speed in city transport was the motor car.

From an early stage in motor car development, car design and marketing focussed on speed. 'Of the multitude of development paths, the royal road to the speed machine was taken: large high performance vehicles, and later, small, spirited cars became the models of automotive design' (Sachs, 1992, p. 132). Car racing not only made speed exciting for the masses, but it also decisively influenced the early and ongoing technical development of the motor car. However, as Sachs explains, this path did not have to be the one chosen. Indeed, early in the development of the motor car industry, Karl Benz (in contrast to Daimler Mercedes) attempted to choose another path, one that focussed on safety and comfort rather than speed. His attempts proved futile, and he (along with other opponents of the trend towards speed) could not stem the growing expectations for higher top speeds and quick acceleration as the main priorities in motor car design.

The expectations of motorists about the speeds that their cars should be able to achieve continue to climb. Since their introduction into city transport, the speed potential of cars has increased enormously thanks to the application of technology, often developed in the motor racing industry. Car manufacturers continue to market their cars on the basis of speeds that could never be legally achieved in most nations, now over 200 mph (320 km/h) for some cars. Such high performance from modern cars is unnecessary for practical purposes. In most nations, there are few roads where speeds over 70 mph (or 110 km/h) are legal. Modern cars 'with their powerful engines, their streamlined bodies, and their high-speed suspension systems ... are as suited to the delays of city traffic as a chainsaw is for cutting butter' (Sachs, 1992, p. 124).

As explained in Chapters 2 and 3, the quest for higher motorised speed began to dominate transport planning in cities from the mid-1920s. It was assumed that increasing speed in urban transport would produce positive results for cities, the economy and society. However, the efficacy of speed in city transport should not be taken as given (Taylor, 2014).

A central concept in transport analysis is that time should be saved. This was seen as particularly important for any transport task. Transport planning orthodoxy saw travel as a 'derived' demand—derived from the need to participate in activities at an alternative location, meaning that time spent travelling was 'wasted time'. There is often no acknowledgement that time spent travelling may have an intrinsic utility (Mokhtarian & Salomon, 2001), or, as we demonstrate in Chapter 4, that time is rarely saved by increasing speed (Metz, 2008). The belief in time saving was a central component of transport decision-making from the 1920s. The appraisal of transport proposals continues to be dominated

by the (usually unjustified) expectation of user benefits resulting from travel time savings, which promotes continuing pressure to increase the speed of traffic (Banister, 2011).

The distances travelled by city dwellers increased as transport became faster. Until around 1860, when walking was the main mode of transport with travel speeds of around 5 km/h (3 mph), daily travel distances were less than 1 km (0.6 miles) per person per day. There was a slow increase in speed until the 1960s, when daily travel distance had increased to 10 km (6 miles). However, by 2000, this had increased to 50 km (or about 30 miles) (Banister, 2011). Banister asked where this exponential increase might end, or whether there are no limits to the distance that could be travelled.

1.4 The growing cultural obsession with speed and time saving

Cities have not always been associated with speed. Medieval cities in Europe were seen as much as ‘places of rest, worship and periodic festivity as they were of motion’ (Latham & McCormack, 2008). With the arrival of industrialism and capitalism, cities became a more powerful force in economy and society, and they also became places where speed was seen as advantageous. One of the first markers of this speed was the rapid expansion of railways across North America and Europe in the 19th century. Railways were instrumental in changing the way people thought about the relation between society and space, and also about the value and meaning of time. The advent of the railway initiated a concern with timetabling, which led to urban social and working life being increasingly scheduled (Urry, 2007). Railways made the notion of ‘clock time’ the dominant way of understanding time (Fig. 1.2). This meant precise timing of work and leisure activities, and the view of time as a resource that could be saved, consumed, organised and monitored, and used as ‘productively’ as possible. This required the clear separation of personal time from work time and ‘a regimentation of the movement of goods and people, both of which were deemed dependent on centralised transport planning and the engineering of circulation (hence Le Corbusier’s metaphor of city as machine)’ (Hubbard & Lilley, 2004, p. 276). The concern with timetabling increased with every new transport system that was adopted (Urry, 2007).

Before the advent of the railways, speed was not of great concern to people. With railways came the idea that speed is valuable, and that faster trains are better than slower trains. Once this was accepted, it was also assumed that new railways (or any transport infrastructure) were justified if trips became faster, and that higher speeds aided economic competitiveness. This was also based on the assumptions that time spent travelling is wasted time and that faster speeds would save time.

At first the speed of the railway was alien to people, generating fears (of derailment or collisions), yet this speed soon became a societal reality that was taken



FIGURE 1.2 Clock time is still important for railways. Swiss train station clocks are models of simplicity and elegance admired the world over: clock and meeting point at Zurich main station, Switzerland. (Credit: Joachim Kohler Bremen—Own work, CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=60254453>)

for granted. The growth of the railway and its transformative power on societal attitudes to speed and progress was intertwined with the growth of capitalism. By 1900 speed was equated with modernism and vitalism (Trentmann, 2016). Ironically, the 20th century, which began with promises of time saving and abundant leisure, ended with anxieties about time pressure and a time famine, leading to a global disquiet about the speed of life (Trentmann, 2016) and the growth of the various ‘slow movements’ outlined in Section 1.8.

Modern Western cities evolved in a cultural context of a growing acceptance of speed and a culture of individualism. Because the dominant cultural belief about speed was that ‘faster is always better’, when people attempted to use speed to their own advantage, there seemed little choice for others but to

continue to increase their own speed. This culture of speed affected all aspects of the city, not least our transport systems.

How did our society develop an obsession with speed and time saving in motorised city transport? Was it an expression of mass preference? Was it the product of a natural Darwinian evolution by technological selection, where the fitter motor car drove slower modes to extinction (Norton, 2007)? Was it because humans are hard-wired to want to go faster and faster? Or are there other explanations of how our cities, particularly in modern Western societies, came to be dominated by the quest to increase the speed of travel? As we explain later, the likely explanation is that our attitudes to speed in the city were manipulated by powerful interest groups.

Western societies have developed a mythology that speed is always good. Yet as this book demonstrates, speed does not give us the advantages that many people (including planners and policy-makers) believe it does. In many cases, increasing speed achieves exactly the opposite of what we expect. Instead of saving time, it can consume our time. More importantly, it can undermine our health—the health of individuals, communities, cities, nations, economies and the planet. To understand why the mythology of the benefits of speed has become so dominant, it is important to examine the little-known history of the growth in the acceptance of speed in city transport, dating from early in the 20th century.

This culture of speed did not simply develop due to some inexorable logic. Speed in city transport did not come to be dominant because it has innate advantages for cities or for society. Modern Western cities could have evolved differently, without an obsessive focus on speed in motor cars. The story that a ‘love affair with the automobile’ was the reason the motor car became so dominant so quickly was also part of the mythology of the acceptance of speed. The ‘love affair’ metaphor first appeared during a 1961 episode of a television programme titled the DuPont Show of the Week (sponsored by DuPont, which then owned almost a quarter share of General Motors). The love affair story was a carefully crafted strategy developed as a response to protests about road construction in New York. It helped to promote two ideas that became embedded in American society for decades afterwards: that Americans are bound to cars by something more than need, and that anyone who challenges that bond must, by inference, be anti-American (Badger, 2015). It was not a concept that evolved naturally in the 1920s when cars began to occupy city streets in large numbers.

Even after the invention of motor cars and their appearance on city streets, it seemed at first as though civic leaders and the general public were going to prevent the development of a culture of speed in the city. Different social values were dominant in cities in the first two decades of the 20th century. The freedom and safety of people walking and cycling, and the acceptance of the street as a public space, were regarded as more important than speed.

In the United States, as motor cars increased in number, so too did the number of people killed by cars. Between 1920 and 1928, road crash fatalities doubled to 26,000 per year. The initial response to this slaughter was an outcry:

from the public, in cartoons, editorials and letters to the editor in major newspapers, from chambers of commerce, and from police, judges and juries. Common law defended the right of people on foot to use the street: under the common law tradition, which both the United States and Canada inherited, the street is a public space for all, to be used by any persons as long as they do not endanger or obstruct other users. Speed limits averaging 10 mph (16 km/h) in US cities in 1910 were set. These would have limited cars to pre-motor age speeds, thus negating a perceived advantage of motor cars in cities (Norton, 2007).

Even the Model T Ford was originally envisaged as a farmer's car to connect the farmer to the market; its popularity was expected to wane as the United States urbanised (Flink, 1990). In cities, people already had more efficient, inexpensive and convenient forms of transport in walking, cycling, streetcars and commuter railways. While people in rural areas welcomed the speed provided by the motor car, 'Cars met with particular hostility in densely settled cities, where people living in crowded tenements used the streets for games, socialising, buying and selling, and other activities that had nothing to do with transportation. In this environment, the appearance of an automobile represented a threat to an accustomed way of life, while at the same time posed a very real safety hazard' (Voliti, 2004, p. 18).

The powerful individuals who made up the motoring lobby at first tried to accommodate the dominant view of the street as a place for people, encouraging drivers to slow down so that the public did not resent the motor car. But they soon learned that they needed to respond to the negative public and official views about speed in the city, which would undermine the sale of cars and the expansion of the motoring industry. They recognised that speed could be marketed as an advantage that the motor car had over other modes, and it was speed that made cars most attractive to potential buyers. But how could the motoring lobby respond to the outcry against speed?

The most important step in the response to the outcry against speed was to become an organised and united group. Once the groups supporting the motor car became organised, any opposition to speed was effectively and forcibly suppressed. Even though speed was a critical factor undermining road safety, the economic forces of the automobile industry comprehensively dismissed the public's negative views on speed. This was 'one of the biggest shifts in the status quo that ever occurred in history ... and it affords some lessons that can be useful' (Norton, 2015).

1.5 Motordom—constructing a culture of speed in the city

The organisations that eventually became known as motordom in the United States—automobile clubs, car dealers and car manufacturers—were not a coherent group at first. At the Hoover National Conference on Street and Highway Safety in 1924 (convened by Herbert Hoover, the then US Secretary of Commerce and later the US President) they met, became organised and developed a common strategy (Norton, 2011). They coined the term 'motordom' to describe the grouping of these organisations. As well as becoming an organised

group, motordom recognised a common enemy—those who opposed speed in the city. To be successful, motordom needed funding, which they realised could be had from the motorists themselves through gasoline taxes. These taxes were astutely seen by motordom as a way of paying for roads and streets to solve traffic problems. By 1925, all but four US states were taxing gasoline.

Understanding the history of motordom, and how it changed the mental infrastructure of speed in the city, is critical to the arguments here. This book shows how proponents of slowing city transport can learn lessons from the tactics and successes of motordom. The arguments in this section are based largely on the research of Peter Norton, author of *Fighting Traffic: The Dawn of the Motor Age in the American City* (2011). Similar accounts of the rapid acceptance of speed in the city can be found in Canada and other nations (Davies, 1987). Almost 100 years ago, motordom used creative ways to challenge dominant notions about speed in the city. If motordom could so comprehensively transform how society envisioned speed in the city, it is also possible that in the 21st century, a culture of slowing city transport can occupy centre stage in the minds of the public, planners, other professionals and politicians.

The challenge for motordom in the 1920s was immense. The speed provided by motor cars in city streets was creating unprecedented carnage in road crashes (mainly cars killing people walking). Children aged 5–14 were the most vulnerable group: there was a 94 per cent increase in child fatalities for the period from 1913–17 to 1918–22 (Zelizer, 1994, p. 38). Instead of motor cars, the public wanted improvements in public transport (McShane, 1995). Public hostility towards speeding cars in cities was strong and growing in the early 1920s. A major threat to the future of the motor car as a faster mode of transport was the many calls for technological solutions to the dangers caused by speed, including equipping cars with governors (devices designed to limit car speeds).

This speed governor idea emerged as a real proposal in Cincinnati in 1923, when over 40,000 people (more than 10 per cent of the city population) signed petitions for the introduction of a local ordinance requiring that cars be fitted with speed governors limiting them to 25 mph. If this was passed into law, it would reinforce the view that motorists' speed was the road safety problem. It would also deprive motorists of what they regarded as their chief advantage over other modes. 'Terrified city automotive interests organized a massive and well-funded "vote no" campaign, and on election day, voters crushed the plan' (Norton, 2007, p. 339). This was one of many inventive, intensive and ultimately successful public relations campaigns conducted by motordom.

As motor cars grew in number, another problem emerged: congestion was becoming an issue, not just for the motorists, but also for all other street users, including the streetcars. Motordom had to devise an alternative narrative to explain why motor cars and speed were not the problem, and the real causes of all the problems were to be found elsewhere.

As Peter Norton explains, motordom had to change the stories about the past, and the visions we have of the future. The dominant story we now have

of the early 20th century is that we constructed cities for cars because that was what we preferred. In this dominant story, which many people now believe, the approval of the speed provided by cars was due to mass preference; it was a product of natural evolution. In reality, people then were saying that they preferred to have streets for people, not motor cars. The vision for the future promoted by motordom involved notions of modern, new, faster cities and a 'new age'—'the motor age'. Peter Norton explains that when you are told 'it's a new age', that implies that the ways we have been doing things are now open to question and outdated (Snyder, 2014).

There were several components to this re-imagining of the problems of city transport in the era of speed. The whole mind-set about the city, the street and speed needed to be changed. First, the blame had to be shifted from cars to 'reckless drivers', and more importantly to 'reckless pedestrians'. The blame (for both road crashes and for congestion) had to be shifted from cars themselves to the space provided for cars. To support these shifts in blame, licensing of drivers, road safety 'education' (particularly for children) and the application of civil engineering to complement traffic engineering were all employed.

Another strategy employed by motordom was to reframe the way in which road fatalities were reported and recorded. In the early days of the motor car, accounts of traffic deaths were framed by opponents of speed in terms of outrage against automobile killings as individual tragedies, such as the death of a child, or by comparing the total number of automobile deaths annually with deaths in the first World War. The response of motordom to this perspective on road crash fatalities was to promote a new way to frame the problem—in fatalities per mile travelled (Vardi, 2014). This would show that as car travel increased, the fatality 'rate' lowered, suggesting that the road safety policies adopted by authorities were having a positive effect.

Motordom also realised that cars could not compete with other modes for the efficient use of space, or the efficient movement of large numbers of people. Motordom did, however, make a claim that cars provided freedom (e.g. from fixed tracks and from timetables), offering the prized convenience of seamless door-to-door movement. In combination with strategies to switch attention from cars as the cause of congestion and road crashes, motordom reframed the conception of motor cars as the mobility mode that promoted 'freedom', a concept with considerable nationalistic appeal in the United States.

The idea that motor cars were killing people was a particular problem that had to be dealt with. One strategy was to move the blame to people, and away from the motor car. (This strategy has parallels with the gun lobby argument that 'guns don't kill people, people do'.) By focussing on people as drivers, motordom lobbied governments to introduce licensing for motor car drivers. They developed a story that reckless drivers were the problem, not cars themselves. By arguing that these reckless drivers would lose their driving licences, keeping them off the streets, this deflected blame from the motor car itself.



FIGURE 1.3 People crossing the street at Fifth Avenue and Broadway, New York, 1910, before the concept of jaywalking was invented. (Reproduced from Library of Congress, Prints & Photographs Division [LC-DIG-ggbain-15110], <https://www.loc.gov/pictures/item/2014695084/>)

Motordom was also successful in separating recklessness from speed. In addition to reckless drivers, slow street users (people walking or cycling) could be cast as reckless. Hence, motordom developed the idea of training children to stay off the streets and to insist that people walking take responsibility for their own safety (i.e. to not be reckless).

To keep people on foot ‘in their place’, cities across the United States began to regulate where people walking could cross streets. Before the 1920s, people could (and did) cross streets wherever they chose (see Fig. 1.3). During the 1920s, crosswalk lines began to be marked on streets. These were routinely ignored at first. When the motoring lobby promoted the idea that people walking on streets without regard for cars were reckless and irresponsible, they also invented a new term to ridicule such people—‘jaywalker’. In the United States in the early 20th century the term ‘jay’ was a term of derision and condescension, referring to a rural ‘hick’, regarded by city dwellers as stupid or naïve. Such persons were unaccustomed to the pace of a city.

Laws to guide the behaviours of people walking were introduced in cities throughout the United States: jaywalking was legally outlawed in Los Angeles and Washington by 1923, with signs indicating ‘Jay Walking Prohibited by Order—Police Department’. The Automobile Club of Southern California paid for the signs in Los Angeles. Anti-jaywalking laws became the norm in US cities

by the 1930s. However, rather than legal rules and signs, ridicule was seen as a more powerful socialising force to restrict the behaviour of people on foot.

The term ‘jaywalking’ gained acceptance during the 1920s and a massive shaming campaign prompted a radical shift in public attitudes to the use of streets, largely due to a concerted effort from members of motordom. Motordom employed the volunteer services of the Boy Scout movement, all over North America, to hand out cards to jaywalkers (similar to propaganda pamphlets). These cards had messages such as ‘For safety’s sake, cross here, not here, not this way ... Quit Jay Walking’. In some cities clowns were used to depict jaywalkers as ignorant rural folk, behaving in pre-motor age ways. Newspaper coverage of road crashes changed from most articles blaming the driver in 1923, to most blaming jaywalkers in 1924 (Norton, 2011). Ridiculing jaywalking became a prominent feature of traffic safety campaigns in North America. However, in the early 20th century the strategy of restricting walking behaviour in cities was also becoming commonplace in other countries, as Box 1.2 illustrates.

An important component of gaining public (and legal) acceptance of speed in cities was the way in which the meaning of ‘traffic safety’ was formulated by motordom. The National Automobile Chamber of Commerce formed a ‘Safety Committee’, which soon became the leading national institution for traffic safety. The committee argued that to achieve high levels of safety required the education of all road users, but particularly pedestrians, and even more so, child pedestrians. The American Automobile Association (AAA) and local automobile clubs took over all school safety patrols in the 1920s. Under this new control, these school safety patrols operated in a way that supported the freedom of motorists to speed, rather than promoting a child-friendly urban environment, where children’s independent mobility is valued. Previously, when the patrols were run by local safety councils, cars would be stopped so that children could cross safely. In contrast, the AAA-operated patrols made the children wait till there were no cars before they were allowed to cross the street.

BOX 1.2 The Little Golden Calf.

As the following quote from a satirical Russian novel indicates, cities in Russia also imposed grave restrictions on the freedom to walk, dating from at least the 1930s.

‘When everything was finished, when our beloved planet assumed a fairly habitable look, motorists appeared on the scene. One should note that the automobile itself was invented by pedestrians but somehow the motorists forgot that very quickly. Gentle and intelligent pedestrians began to get squashed. Streets, created by pedestrians, were usurped by motorists. Roadways were widened to double their former size, sidewalks narrowed to tape width and pedestrians began to cower in fear against the walls of buildings. In a large city, pedestrians lead a life of martyrdom. A kind of transportation ghetto was set up for them. They are allowed to cross streets only at intersections, that is precisely in those places where traffic is heaviest and where the hair by which a pedestrian’s life usually hangs is most easily broken ... and if, on occasion, a pedestrian succeeds in escaping from under the silver nose of an automobile, he is promptly fined for violating the traffic law’ (Ilf & Petrov, 1932).

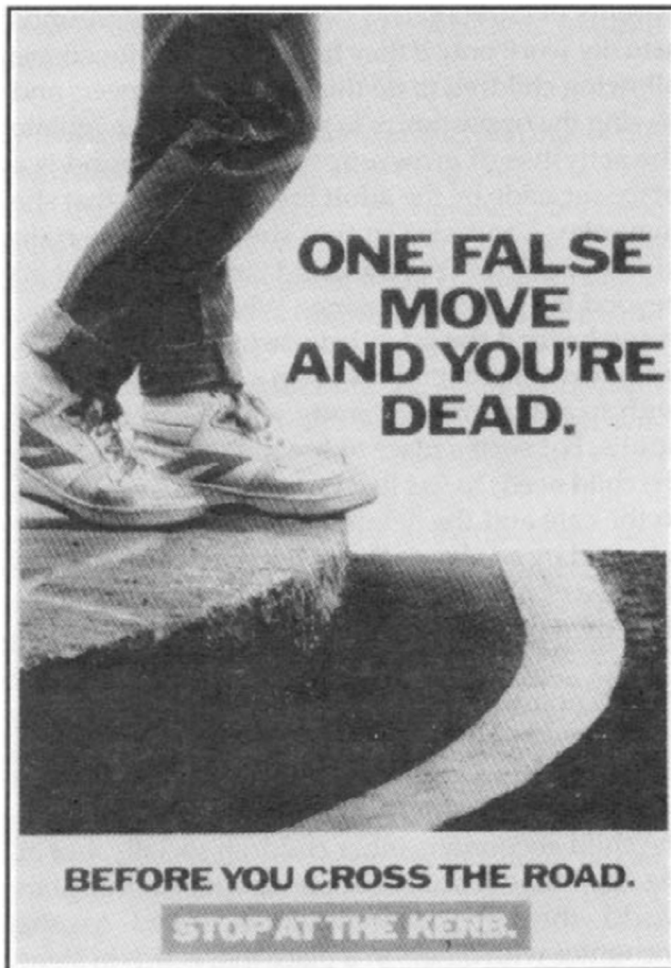


FIGURE 1.4 One False Move: a UK road safety poster from the 1980s. (Credit: Public Domain, <https://commons.wikimedia.org/w/index.php?curid=7376762>)

The AAA became the leader in the provision of school safety information. It supplied this free to public schools, and the materials instructed children on how to stay safe on the streets. For example, the AAA provided a colouring-in book for children, with one picture of traffic in a street having the words ‘The street is for autos’ constantly visible in the middle of the page as children coloured in. Safety campaigns promoted streets as places for cars in other nations as well, and these continued well into the 20th century. A famous road ‘safety’ campaign in the United Kingdom depicted a pair of child’s feet on the kerb, with the slogan ‘One false move and you’re dead’ (see Fig. 1.4). As Brent Toderian tweeted, ‘Fear-based messages like this were about reducing pedestrian deaths by reducing pedestrians’ (Toderian, 2014). But it was not just in schools that motordom

influenced road safety. The car maker Studebaker provided a grant of \$10,000 to Harvard University in 1926, to set up the Albert Russel Erskine Bureau for Street Traffic Research, which remained active through much of the 1930s.

The Erskine Bureau quickly developed a reputation as the only recognised organisation for traffic expertise. Its graduates were highly regarded, particularly in comparison to engineers from other institutions. With the help of the Erskine Bureau, motordom could argue with authority that the way to promote road safety and relieve congestion was to re-engineer and re-build cities, rather than limiting the speed of cars and promoting the inherently safer modes of walking, cycling and public transport.

The next challenge for the motoring lobby was dealing with the negative perception that cars created congestion on city streets. Motordom set about convincing the world that congestion was not due to an excess of cars, but was caused by a lack of space in the streets. This lack of space could be remedied by civil engineers, working with traffic engineers. The civil engineering argument was also applied to traffic safety. Road crashes were attributed to ‘dangerous failures in road design—failures which highway engineers, with enough money, could fix’ (Norton, 2011, p. 246). As one road safety ‘expert’ argued, cars had the “‘right to speed” and the real problem is that “the road is too slow for the car”” (Norton, 2011, p. 247). Ultimately, highway engineers devised a solution that would not only allow, but also require, high speeds: building ‘safe urban highways’ that were designed for speeds of 50 or 60 mph (Norton, 2011, p. 235).

Streets were redefined as places where people walking, particularly children, did not belong. This redefinition is now an accepted practice in cities around the world. ‘Safety education’ enabled the reduction of child injuries without slowing cars. Motordom proved to be so powerful in spreading its arguments that it even ‘used persistent casualties to argue for more accommodation’ in cities for cars (Norton, 2011, p. 174). Motordom continued to push the view that cars were not the main road safety problem in the 1930s. In 1936, the AAA announced a comprehensive education program for greater safety on streets. In a published textbook on driver safety it explained ‘most of the people killed by motorcars are pedestrians, and the majority of these fatal accidents have been caused by the pedestrian himself’ (Norton, 2011, p. 247). Putting the blame onto jaywalkers continued, as indicated by a poster from 1937, seen in Fig. 1.5).

An important concept in understanding the impact of motordom is the exercise of power. Motordom exercised enormous power: through the gasoline taxes used for road construction; through direct political links with the Commerce Department; and through its well-funded education and propaganda campaigns. Drivers were part of this exercise of power to promote speed ‘every time they travelled at speed in streets, resorting to the horn instead of the brake to proceed’ (Norton, 2011, p. 259). This power, exercised by motorists, forced people walking and cycling from the street.



FIGURE 1.5 Don't Jay Walk poster from 1937. (Credit: Isadore Posoff; Wikipedia Commons, Public Domain, <https://commons.wikimedia.org/w/index.php?curid=6646707>)

While motordom was exercising this power to promote speed, opponents to the invasion of streets by speeding motor cars attempted to organise themselves, for example into local safety councils. Yet, the opponents lacked the funding of motordom and were unable to develop their own institutions. The electric street railways, which provided effective public transport in the early 20th century, also attempted to prevent the dominance of the culture of speed. However, motor car interest groups, notably General Motors, contributed to the demise of these street railways by acquiring them, and then scrapping them and substituting them with buses (Norton, 2011). By the late 1920s street railways were not able to provide effective opposition to the speed of the motor car.

The story of motordom provides important lessons for this book. It shows how the supporters of speed used tactics involving a construction of the meaning of transport that changed the culture of cities in ways that undermined health in multiple and powerful ways. The story of motordom also illustrates the importance, in any attempt to change culture, of adopting a 'coherent rhetorical

stance' (Norton, 2011, p. 258). Using a careful analysis of the research on city transport and health, this book shows how to respond to the rhetoric and mythology created by motordom. While some of the ideas behind the advantages of slower city transport date back to the 19th century (and even earlier), a groundswell of ideas about transport that recognised the value of the (supposedly) slow modes began to develop from the 1970s. In the following section, we outline some key ideas that are part of this groundswell, and show how this new thinking is becoming mainstream.

1.6 New thinking, new thinkers

The motordom perspective started to come under increasing pressure from the 1970s onwards, in a global context of emerging challenges to established social, economic and environmental conditions. These include, but are by no means limited to: the oil crises beginning in the 1970s; the rise of the sustainability movement (Brundtland, 1987); awareness of pollution in general (and of air pollution and global heating in particular); and growing assertiveness of inner-city populations over injustices such as segregation, 'urban renewal' and free-way construction and blight.

As far as city transport issues are concerned, at first this pressure came from a small number of thinkers and activists, and this grew into a new wave of thinking that is now becoming much more accepted. This progression is now advanced and widespread: indeed, much of this book is illustrated with examples of policy, strategy, tactics and community action which have resulted from—and continue to extend—this changed emphasis on 'slower' forms of movement in cities. The shift took place in many countries and cities across the world, with thought leadership progressively extended from researchers, practitioners and politicians in different cities at varying rates. At times advances in particular cities were stalled by politics, but each new high-tide mark in thinking and action became the baseline for the next round of innovation elsewhere. The overall tide of slower movement cultures has risen across the world and provides much of the underpinning of the approach taken in this book.

It is valuable here to illustrate this growing repudiation of the motordom perspective and the increasing recognition of the centrality of slower movement to healthy cities and lives. Although advances have been spectacular across all of the 'slower' modes, the focus here is on walking, where the most extensive transformation of thinking has taken place. A brief review of leading research themes from the 1980s onwards will help place the new way of thinking in perspective.

Signs of changing thinking in walking research in the 1980s were arguably first discernible in the United Kingdom, influenced by many researchers, but three individuals in particular. John Roberts was the founder of TEST (Transport & Environment Studies) and one of the pioneers of sustainable transport planning and a mentor to many. Amongst over 150 publications were *Quality Streets*

(1988), *User Friendly Cities* (1989) and *Travel Sickness* (1992) (Roberts, 1989; Roberts, Cleary, Hamilton, & Hannah, 1992; TEST, 1988). Much of Roberts' writing is now available in recent issues of the journal *World Transport Policy and Practice*.

A second key thought leader was Mayer Hillman, known particularly for his work on cycling and health and as a trenchant critic of inadequate policy on climate change, but also for his seminal works on walking, such as *Walking is Transport* (Hillman & Whalley, 1979). With John Adams and John Whitelegg he published the frequently cited *One False Move: A Study of Children's Independent Mobility* that linked the recent reduction in child casualties on British roads with the loss of freedom that children have experienced because of the increase in traffic. Third, John Whitelegg is founder and editor of the journal of *World Transport Policy & Practice*. His papers and speaking appearances have inspired a generation of young researchers as have his many books, including *Transport for a Sustainable Society* (1993), *Critical Mass* (1997) and *Mobility: A New Urban Design and Transport Planning Philosophy for a Sustainable Future* (Whitelegg, 1993, 1997, 2016).

By the 1990s there was a clear growth of a research paradigm on sustainable transport—and later, on walking—involving researchers such as Jan Gehl from Denmark; Carmen Hass-Klau, Helmut Holzappel and Rolf and Heiner Monheim from Germany; Robert Cervero, John Fruin, Allan Jacobs, Rich Untermyer, Anne Vernez Moudon and Holly Whyte from the United States; David Engwicht, Jeff Kenworthy and Peter Newman from Australia; and John Adams, David Banister, Phil Goodwin, Tim Pharoah and Rodney Tolley from the United Kingdom. The latter edited *The Greening of Urban Transport: Planning for Walking and Cycling in Western Cities* in 1990, followed by two further editions in 1997 and 2003 (Tolley, 1990, 1997, 2003) and founded CAST (Centre for Alternative and Sustainable Transport) in 1996, which was the first research institute wholly focussed on walking and cycling. CAST was the lead convenor of the UK's inaugural Local Authority Walking Group and of the 1997 UK National Walking Conference, both of which were probably the first of their kind.

It is interesting to trace the development of approaches to walking research in the 20 years since these gatherings. Amongst the main conclusions from the 1997 UK conference were:

- Walking is not an index of deprivation but of sustainability of life;
- 'Transport' is not just 'motorised vehicles': walking also is transport;
- Promoting walking is not a bolt-on extra: it is fundamental to reducing traffic;
- Walking is healthy physiologically, psychologically, environmentally; and
- A good walking environment is a good economic environment.

From a current perspective, these seem basic first principles, but they certainly were not seen in that light by many practitioners and politicians at the time.



FIGURE 1.6 In 2015, nine Western Sydney councils signed the Walk21 International Charter for Walking, joining more than 500 councils around the world in a commitment to encourage more everyday walking. (Credit: Western Sydney Regional Organisation of Councils (WSROC))

Indeed, the conclusions stirringly reported ‘We are at a crossroads, a point in history where these key issues are now being recognized’.

Built on these foundations, the year 2000 was a significant one for the expansion of walking research and promotion. First, the UK government commissioned research in order to provide a judgemental forecast of the future of walking throughout Europe during the first decade of the 21st century. The Delphi study that resulted questioned ‘experts’ from across Europe (Tolley, Bickerstaff, & Lumsdon, 2003) and analysed the rich and thick source of comments provided by them. These included ‘How can the myth that “cars save time” be challenged?’ and ‘What messages and communication media will convince councils that they cannot have more walking without less car travel?’

Second, a partnership of the UK’s leading walking policy-makers, researchers, campaigners and practitioners organised an international conference on walking, in London in February 2000 (Walk21, 2000). Stimulated by the London Walking Forum’s (2000) publication *Walking: Making it Happen*, the resulting Walk21 organisation—the name referring to ‘Walking in the 21st Century’ or ‘Walking coming of age’—has since become an international organisation supporting and promoting walking. Its objectives include disseminating knowledge; showcasing cities with good walking policies; integrating walking into transport, land-use planning, health and other relevant policy sectors; and involving stakeholders from political, professional and public arenas. The Walk21 Conference Series, The International Charter for Walking (see Fig. 1.6 and Chapter 9) and The Global Walk21 Network are some of the delivery mechanisms that have resulted.

At the London Walk21 conference, there was much focus on the need for research, resources and communication. A key conclusion was that “Talking the talk” is a necessary precondition to knowledge and understanding, and indeed to raising awareness of these issues amongst those who do not even conceptualise walking as a form of transport at all. In the past, walking—disadvantaged by its very ubiquity—has been an unexplored byway of research’. As Jan Gehl’s (2000) opening address noted, ‘There is much more to walking than walking’. Another conclusion, reflecting concerns of delegates at the time, was that ‘We have to encourage a paradigm shift in the way that policy-makers think about walking: meeting travel demands for walkers is a pre-requisite for global sustainability’ (Walk21, 2000).

The Walk21 conference has been held in a different city every year since 2000, and its conclusions are contemporary indicators of the concerns of walking research at the time. To take just 5-year snapshots, Walk21 in Zurich 2005 was titled ‘Everyday Walking Culture’ and the themes focussed on such issues as ‘How can we establish a walking culture and create a positive image of walking?’ (Walk21, 2005). By 2010 in the Hague, there was a focus on public spaces as economic assets and the word ‘sojourning’ began to be widely used to reflect the value of ‘parked pedestrians’ to urban life. The conference also called for better measurement and data and for us to ‘measure walking and value happiness—it’s a universal currency’ (Walk21, 2010). By 2015, Walk 21 was in Vienna, one of the most walkable and liveable cities in the world where the focus had moved on from Gehl’s ‘necessary activities’ to ‘optional’ and ‘social’ activities in the city (Gehl, 2010)—in other words to comfort, attractiveness and quality of walking environments. Clearly, the earlier foci of walking research—individual road user behaviour and infrastructure provisions—have been augmented over time by more sophisticated concerns. These include: the needs of people living in the city; ideological issues, such as the myths and perceptions of individuals, planners and politicians; and the role of institutions in fields such as regulation, finance and data.

The extraordinary upsurge of walking research has by no means solved all of the pressing issues that walking faces—as this book testifies—but each stage in the evolution of thinking has raised the bar and increased the sophistication of the debate. That is also cause and consequence of increasingly intense practical interventions by all levels of government, communities and the burgeoning numbers of NGOs and advocacy movements. Individual thought leaders have been critical to advancing the walking agenda—and although it is invidious to mention just a few names from a burgeoning list of inspirational researchers, writers and speakers—it is reasonable to name-check (apart from those already mentioned) Mario Alves, Eric Britton, Werner Brög, Ralph Buehler, Matt Burke, Nick Cavill, Mark Fenton, Larry Frank, Billie Giles-Corti, Dario Hidalgo, Sonia Lavadinho, Matt Lerner, Todd Litman, Dinesh Mohan, Ian Napier, Enrique and Gil Peñalosa, John Pucher, Janette Sadiq-Khan, Daniel Sauter, Jeff Speck, Bronwen Thornton, Geetam Tiwari, Ellen Vanderslice, Celia Wade-Brown and

Jim Walker. The point is emphasised by noting that the Delphi study cited earlier struggled to find more than 100 ‘walking experts’ in Europe in 2000 across fields of research, practice, advocacy, policy and planning, whereas it is evident now from a cursory scrutiny of publications, conferences, webinars, blogs and posts in the fields of urban and transport planning, urban design, health engineering and many more—that there is a huge reservoir across the world of understanding and expertise in walking. Indeed, a Google search of ‘promoting walking’ now produces over 70,000 results. It is no exaggeration to say that in little more than two decades, walking has gone from periphery to mainstream in the debate on the future liveability of cities.

1.7 The growing momentum towards ‘slower’ city transport

The focus on walking is part of a wider trend towards supporting a ‘slowing’ of city transport. There are signs that the societal obsession with speed is slowing. This is evident in city transport systems, where there is a growing realisation that low-speed environments have advantages. As Carlos Pardo (2017) suggests, policy-makers and planners are searching for ‘different measures or policies that will reduce speeds and increase liveability and even increase efficiency’. Throughout this book we describe many of these policies. Here we provide three examples from different parts of the world: lower motorised traffic speeds, first appearing in European cities; freeway removal; and the concept of *Ciclovía*.

First, European cities have shown the way in reducing the speed of motorised traffic in cities. Since the first 30 km/h speed limit was introduced in the small German town of Buxtehude in 1983, the idea of lower speeds, particularly in residential streets, has spread across Europe and to many other parts of the globe. In Switzerland, 30 km/h zones have been allowed by law since 1989, and were first established in 1991 in Zurich. Graz, Austria, was the first city to introduce a city-wide 30 km/h limit on all roads apart from main arterials, in 1992 (see Fig. 1.7). In the United Kingdom, more than 13 million people live in 20 mph zones, which are publicised using the slogan ‘20’s Plenty for Us’. In the United States, 20 mph ‘neighbourhood slow zones’ are being trialled in New York and Philadelphia, and Portland, Oregon, has installed thousands of 20 mph speed signs in residential streets (Small, 2019). The road safety benefits of lower speeds are clearly demonstrable, and there are other benefits as well, including lower pollution levels, increased active transport, higher property values and increased levels of children’s independent mobility.

A second, dramatic, example of slowing city transport by the removal of a high-speed road comes from South Korea. In Seoul in 2003 the Cheonggyecheon expressway that carried 168,000 cars per day was demolished, uncovering a section of the historic Cheonggyecheon stream, creating both ecological and recreational opportunities along a 9 km corridor in the city centre. The



FIGURE 1.7 Streets in central Graz, Austria, where a 30 km/h speed limit applies to more than 75 per cent of the road system. There are no speed limit signs here, as everyone knows what the default speed limit is. (Credit: Rodney Tolley)

expressway, built in the 1950s, had been regarded as a success shortly after its construction, covering an eyesore of polluted water and symbolising the successful industrialisation and modernisation of South Korea. However, by the 1990s, the expressway was seen as destroying downtown Seoul with traffic and pollution. Taking down the expressway was widely regarded as political suicide that would create traffic chaos. Yet, traffic chaos did not eventuate, partly due to improved public transport, and the expressway was replaced with a green river park that gave the residents of Seoul a place to walk, sit and enjoy an unpolluted environment (see Fig. 1.8). Property values near the corridor increased by 300 per cent. Fish, insects and bird species have thrived in and around the stream. The urban heat island effect was also diminished (Rao, 2011). More than a dozen expressways have been demolished in Seoul since 2003, and public transport continues to be strengthened.

The third example is the global spread of *Ciclovía*—the practice of closing streets to cars at weekends and opening them to walkers, people on bikes, rollerbladers, jugglers, dancers and life in general. *Ciclovía* began in Bogotá in 1974 and is now in place in hundreds of cities across the world including Ottawa, La Paz, Paris and many cities in countries as diverse as India and Mexico, sometimes under different names such as Open Streets, Sunday Bikedays and Car-free Streets (see Fig. 1.9). Today, 120 km of Bogotá streets are closed every Sunday, when



FIGURE 1.8 The green river park and reclaimed Cheonggyecheon stream in Seoul, South Korea, after removal of the Cheonggyecheon expressway. (Credit: Sybil Derrille)



FIGURE 1.9 People of all ages on bicycles and skates, enjoying the Sunday morning Ciclovía in Mexico City. Even the dog gets an outing, if not exercise. (Credit: Rodney Tolley)

people participate in Ciclovía. Almost a million of the 10 million inhabitants join this remarkable festival of active movement in public space (Begg, 2013).

All of these examples are accompanied by a broader societal reaction against the culture of speed, manifested in new social movements to promote slowness. We turn now to a brief discussion of these developments.

1.8 The rise of slow movements

Increasing numbers of people are recognising the value of a slower pace of life, and the costs of living life at high speed. A powerful explanation of the problems of a life built around speed and the benefits of a slower pace is provided in a Western Australian Road Safety advertisement, created with the input of Carl Honoré, author of *In Praise of Slow*. Box 1.3 provides extracts from the text of this advertisement.

The first slow movement began in Italy as the Slow Food movement in the 1980s, and several other slow organisations have emerged since then. In Norway in 1999, Geir Berthelsen created *The World Institute of Slowness*, which outlined a vision for a ‘slow planet’, and the need to teach the world about the value of slowness. Similarly, in Austria, *The Society for the Deceleration of Time* was founded in 1990. One of its imaginative strategies for slowing people’s walking

BOX 1.3 Enjoy the ride.

*If life’s a race, where’s the finish? And who are we competing with?
Is there a prize for first place? Or do we just reach the end a little quicker?*

We’re only just skimming the surface of life. Humans just aren’t designed to go that fast. Sooner or later we crash. To cope with this speeding life our bodies release chemicals that activate our adrenal glands, increase our heart rate and raise our blood pressure. These responses cause us to grind our teeth, sleep poorly, crave fatty and sugary food, get headaches, feel stressed, get sick more often and lose our sex drive. And in the long term we’re in the fast lane to heart disease, sexual dysfunction, allergies, diabetes, depression, anxiety, muscular pain and a load of other stuff with names too long to remember.

But when we slow down, we discover that life has a natural pace. And it’s good. We slide into a groove that’s always been there. Life becomes richer, more pleasurable and more fulfilling.

We may do fewer things, but what we do we do well. We breathe. When was the last time you actually took time to breathe? Not just the shallow ticking over of your respiratory system. To really breathe. Taking a long slow breath in to its comfortable conclusion. And letting it all out, and doing it again, and again and again until you’re flooded with calm. Imagine life lived in this zone. So why haven’t we slowed down before? If you’re worried life will overtake you, you’re wrong. Life is where you are and what you’re doing right now, and now, and now.

Source: Transcribed from the Western Australian Road Safety Advertisement—Enjoy the Ride (Road Safety Council WA Australia, 2011).

behaviour was similar to one of the motordom tactics. In town centres, people seen rushing were stopped and given a symbolic fine—a toy tortoise that they were asked to steer for 50 slow yards before they were permitted to continue (Trentmann, 2016). Other creative disruptions by this society include placing hundreds of deck chairs for a collective siesta and presenting red cards to people who damage the quality of life with mindless acceleration (redolent of motordom's jaywalking pamphlets) (Liebmann, 2015).

The slow philosophy has been applied to almost every aspect of life (Honoré, 2004, pp. 216–217). There is slow gardening (where gardeners take their time and follow seasonal rhythms), slow medicine (taking time to evaluate a patient carefully), slow design and slow fashion (where objects are designed to last and made from sustainably-sourced materials), slow travel, slow science, slow living, slow sex, slow parenting, slow cities (Cittaslow) and slow thinking. There is also slow politics (Agacinski, 2003), which recognises that the survival of democracy depends on citizens' commitment to claim time for the 'proper conduct of debates essential for democratic life' (Jaffe, 2014, p. 9). For the purposes of this book, two types of slow movements are particularly important: slow cities and slow thinking.

The slow cities movement (known as Cittaslow when founded in Italy) favours local and traditional cultures and a relaxed pace of life (Knox, 2005). When the principles of Cittaslow slow cities are adopted at a shallow level, strategies such as flexitime and telework can reduce peak transport demand. At a deeper level, slow cities promote a less frenetic pace of life, where it becomes the social norm to live life at a pace appropriate to human well-being. While full membership of Cittaslow is open only to towns or cities with less than 50,000 people, slow city principles can be applied in any city. Cittaslow's charter encourages the promotion of technologies that improve the quality of the environment and the urban fabric. More specifically, it promotes values and practices such as greater areas of green space and vibrant public spaces, reducing noise, air and light pollution, and improving public transport and opportunities for walking and cycling. The emphasis is on people, not speed.

The concept of 'slow thinking' is explained in Daniel Kahneman's *Thinking, Fast and Slow*. A key theme in the book is human irrationality and cognitive bias. One example of such bias is the 'planning fallacy': the tendency of humans to overestimate benefits and underestimate costs (Kahneman, 2011). The history of transport modelling (see Chapter 3) suggests that this cognitive bias has affected city transport systems (in largely negative ways). Kahneman identifies two broad types of thinking: 'System 1' is fast, instinctive and emotional; 'System 2' is slower, more deliberative and more logical. Fast thinking dominates the way people think in modern societies, where people rely on swiftness to make decisions. In fast thinking, automatic responses can dictate our thoughts, feelings and behaviour. The problem with fast thinking is that it often leads to incorrect conclusions.

The relevance of slow and fast thinking to city transport is that many people react with positive emotion to the idea of fast travel, simply accepting

unchallenged norms, and they may find it difficult to think rationally about an emotional topic. While thinking fast leads us to believe that speed saves us time, thinking slow allows us to question this belief, and to consider whether slowing transport may be a more effective strategy if saving time (and promoting wealth and health) is our goal. Whilst everybody can benefit from using the thinking slow approach, it will be most useful for those who can lead change towards creating healthier cities: planners, politicians and policy-makers. As we explain in Chapter 10, these leaders will be pivotal in creating future ‘slow cities’.

1.9 Conclusion

In order to create healthier places to live, work, learn, shop and play, we need to rethink the widely held assumption that faster is always better in city transport, and recognise that speed can destroy place. ‘Slowing city transport’ is a necessary (but not the only) step towards creating healthy places. For city residents to truly experience a place, they must move slowly, or, indeed, ‘stay in place’.

While the cultural obsession with speed may prompt some to question, or even ridicule the ‘slow movement’, it is worth considering where the ‘fast movement’ has taken us over the last 100 years. Transport systems based on the ‘faster is always better’ motto have created a damaging and costly legacy:

- 1.35 million road deaths globally each year ([World Health Organization, 2020](#));
- a huge burden of maintaining road infrastructure (the United States needs to spend over \$4 trillion by 2025 to repair roads, bridges and other infrastructure) ([Thompson & Matousek, 2019](#));
- deaths from air pollution from cars—more Americans die from car pollution than from crashes ([Caiazzo, Ashok, Waitz, Yim, & Barrett, 2013](#));
- surging obesity rates—across nations vehicle use (annual vehicle miles travelled) correlates approximately 99 per cent with annual obesity rates ([Jacobson, King, & Yuan, 2011](#));
- growing levels of road rage ([Møller & Haustein, 2018](#));
- huge and growing demands for energy—transport uses more than two-thirds of the world’s oil production ([Chicca, Vale, & Vale, 2018](#)); and
- a climate emergency—transport is a major (and growing) contributor to increasing greenhouse gases.

We recognise that changing the current status quo, where speed is automatically assumed to be beneficial, will not be achieved with old thinking. It is important that planners, policy-makers and urban residents open their minds to ideas that may at first appear counter-intuitive, or which at least challenge the status quo of the last century, which is leading us to disaster in terms of personal, economic and planetary health. Despite a growing awareness of the importance of ‘slowing’ city transport, there is a huge inertia in transport infrastructure towards

maintaining the speed of travel, both within and between cities. Combined with this is a set of ingrained cultures of thinking, training and political and public attitudes that need to be reversed urgently.

The challenge of overturning 100 years of transport policy aimed at promoting speed could be regarded as what has been defined as a ‘wicked problem’: one that is difficult to solve because of complex and changing requirements. This wicked problem involves multiple stakeholders with diverse views, influenced by personal values, which in turn are often moulded to suit the vested interests of powerful groups. Many individuals feel trapped into a dependency on high-speed modes, as everyone else is using them, and they react with hostility to any suggestion that the brakes be applied to urban transport.

One strategy that can be useful in approaching this wicked problem involves focussing on the concept of child-friendly cities. This concept came to international prominence in 1996, when UNICEF launched its Child Friendly Cities Initiative, which aimed to ‘put children first’ in making cities liveable places for all (UNICEF, 2009). Since then the concept has been applied by several organisations and researchers as a way to promote children’s rights in cities throughout the world (ARUP, 2017). As we explain in more detail in Chapter 11, a focus on children’s well-being can help lift discussions about transport and speed above narrow self-interest, encouraging more collective decision-making. Importantly for this book, the goals of ‘slowing city transport’ and ‘creating child-friendly cities’ are closely aligned. The child-friendly transport modes are the ‘slower’, active modes of walking, cycling and public transport. And there is a growing urgency to move towards these modes.

The urban road transport systems of many cities are now approaching peak capacity. In many nations, there is a discernible shift in policy focus away from planning solely for the speed of motorised traffic towards greater consideration of road safety and the reliability of the transport system. In transport planning and traffic engineering, the emphasis has started to move away from maximising speed to reducing the speed of motorised traffic, recognising that the minimal benefits of speed (especially in residential streets or busy commercial centres) are far outweighed by the disadvantages. These disadvantages can be measured in traffic crashes, reduced physical activity, the loss of children’s independent mobility and, perhaps most notably, the impact of higher speeds on the spreading out of the city, forcing people to travel longer distances to dispersed land uses and requiring significantly more road space and energy consumption. The way in which increased speed leads to increased distance travelled (rather than time saved) is discussed in detail in Section 3.4.2.

In the same way that motordom claimed that the motor age was a new age, almost 100 years ago, supporters of more healthy, sustainable and ‘slower’ city transport can justifiably make the case that the ‘motor age’ is itself now outdated, outmoded and ready to be superseded by a smarter approach, one that recognises that speed can steal our time, money and health. Even though the motoring lobby continues trying to push back progress towards ‘slowing’ the

city, the advantages of ‘slower’ transport and the disadvantages of speed in the city are now much more widely understood. We show how new environmental, economic, social and political pressures are emerging to increasingly challenge the dominance of speed. Cities throughout the world are learning that speed is not the magic solution that motordom promised, and are moving towards new, healthier, more child-friendly and ‘slower’ forms of transport.

1.10 Preview of the book

The book is divided into three parts: Speed, Health and Strategies. In the first part—Speed—we examine and critique the standard arguments about the benefits of speed, for individuals and for the economy and society (Chapters 2 and 3). In Chapter 4, we resolve a paradox, that ‘slowing’ city transport will not only improve our health, but will also ‘save time’. The second part—Health—focusses on the explanation of the ways in which health is promoted through ‘slower’ travel. The most obvious way in which ‘slower’ transport benefits health is in terms of human health (physical, mental and emotional) (Chapter 5). In addition, we demonstrate how both environmental health (Chapter 6) and economic health (Chapter 7) will benefit from a ‘slower’ city.

The third part of the book—Strategies—provides a game plan for implementing the ideas in the book to create ‘slower’, healthier cities. Chapter 8 examines the importance of reducing the speed of motorised traffic as an alternative to policies that have sought to adapt the city and its citizens to speed. Different approaches to achieve this reduction in speed are discussed. Chapter 9 focusses on planning, in particular the rearranging of land uses to shorten trips. It also stresses the importance of ensuring that zoning ordinances and regulations are not biased in favour of high-speed transport. Chapter 10 examines the behaviours, values and cultures that need to be changed to effectively slow city transport. Importantly, we argue here that it is not only the transport behaviours of urban citizens that need to be changed, but also that a fundamental change in the prevailing transport paradigm is required.

The concluding chapter asks whether our collective addiction to speed is, in fact, a central issue in our inadequate response to the global threats facing humanity. Realising the immense difficulty of overcoming these challenges, we show how a child-friendly focus for city planning can provide a potentially fruitful way to navigate the complex issues surrounding the societal dependency on fast modes of transport. We note that slower cities are child-friendly cities and that child-friendly cities must be slower cities, and that both are healthier for everyone, yet until recently speed was seen as a ‘goal’ by city authorities. This begs the question of why we don’t think about speed as a problem rather than as a solution. In an attempt to do just that, based on the research for this book and the arguments presented in the first ten chapters, we conclude with a proposal for a ten-point Manifesto for 21st Century Slow Cities ([Tranter & Tolley, 2020](#)). In response to the devastating impact of COVID-19, the final chapter

is followed by an Afterword, which emphasises the importance of ‘slow cities’ in a world affected by a global pandemic.

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