

## Book reviews

Philip Bagwell and Peter Lyth, *Transport in Britain, 1750–2000: from canal lock to gridlock*, Hambledon, London (2002), 272 pp., £19.95.

This book is about how transport in Britain has changed since the mid-eighteenth century and how we have got to where we are today. It presents an excellent overview on the history of transport and includes all the main modes; in thirteen chapters the reader learns about the history of inland navigation, coastal shipping, the railways, and road, motor, urban and air transport.

Bagwell and Lyth offer more than a traditional technological or political analysis and they have gone beyond the isolated 'single-mode' approach by focusing on competing means of transport. While one chapter is indeed dedicated to each transport mode, the perspective is broadened by setting it in the context of the national network. Thus we learn that the success of coastal shipping in the nineteenth century contributed to the delay in overland road transport; that road freight transport was so inefficient in the eighteenth century because of its relative cost and that it was little used in comparison with the canals; that the railways not only competed with the canal system but also with coastal shipping; that while the drivers of private cars and commercial vehicles were the worst offenders on the road, public transport vehicle drivers were commended by the Royal Commission on Transport in 1931; that during the early twentieth century urban buses competed with cyclists and pedestrians rather than private motor vehicles; and that modern high-speed trains were rivals to domestic air transport. In short, intermodality is considered and discussed in every chapter. This is to be welcomed, although on occasion it interferes with the flow of the text and results in paragraphs hopping from topic to topic without fully connecting the arguments or narrative.

Four broad questions concerning transport and its place in modern society set the tone of the book: its relationship to industrialisation, the State's attempts to plan it, its technological significance, and its 'consumption'. Bagwell and Lyth are very good in answering the first two. For example, while nobody disagrees with the importance of transport during the industrialisation process, the authors point out the different scholarly positions on the question, in other words whether it was a cause or a consequence. The most innovative aspect of the book is its focus on the question of how far the British transport system has been conceived, planned and constructed by the State as an integrated system. And it shows that the answer to this question is: very little. Only the British Transport Commission had integration as one of its objectives in the late 1940s and this came to very little before the Conservative government stripped it of its powers in the 1950s. The book goes on to show effectively how serious have been the consequences of this lack of the integrative element in transport planning.

It is not only the intermodal approach and the clear set of questions that distinguish this book from others in the field. After five chapters on transport modes, chapter 8 describes and explains the nationalisation of the railways by putting it into the context of the political process and structural changes within Britain, for example the formation of the British Transport Commission. The chapter's counterpart is the one on privatisation of transport, including the railways. In both chapters, the authors emphasise the concepts behind the two political concepts, the choices that were made and the consequences of these choices; not only is the economic outcome taken into consideration but also social aspects, e.g. the 1985 Transport Act worsened conditions for bus workers, and the consumer's perspective, for example passengers' complaints.

While the authors shed light on technological developments in every chapter, they devote chapter 9 exclusively to technology. In contrast to the subtle approach of the others, this chapter tends to present technological developments as a tale of progress and achievements by great inventors. Despite some mention of how technology is adapted to society, this is a rather traditional approach for the authors to take, and it is questionable to say, for example, as they do, that 'from a technological point of view, the internal combustion engine has been supremely adaptable' (p. 150). However, in its description of the British high-speed Advanced Passenger Train (APT) and in the analysis of transport's impact on the environment, the chapter gives excellent examples of technological failure.

Where the book leaves something to be desired is on the subject of the 'consumers' of transport, although, it must be admitted, this results largely from the general paucity of research on the subject, for which of course the authors are not to blame. Where the book is particularly strong is in the revelation of all manner of interesting facts, details and opinions, for example: that the royal mail coach was highly esteemed at the beginning of the nineteenth century, how Parliament dealt with 'road hogs' at the beginning of the twentieth and that the London Tube in the inter-war years, unlike London's trams, was socially acceptable for businessmen and suburban housewives alike.

Finally, in chapters 12 and 13 there is a thought-provoking conclusion which shows that long-term planning for transport (such as exists, for example, in France and Germany) has been almost completely lacking in Britain throughout the twentieth century. Bagwell and Lyth rightly 'believe that a study of British transport history over the last two and a half centuries can teach us useful lessons on the direction of transport policy at the present time' and they outline a number of today's problems – congestion, pollution, destruction of the natural environment, the human stress caused by motor traffic – while making forceful suggestions for future policy. Although the volume is

slightly spoilt by careless copy-editing and the occasional egregious typographic error, all in all, this is an excellent book, a demanding analysis for transport historians and a highly informative read for everybody else who is interested in the history of transport in Britain.

Barbara Schmucki, Institute of  
Railway Studies, York

David Hodgkins, *The Second Railway King: the life and times of Sir Edward Watkin, 1819–1901*, Merton Priory Press, Whitchurch (2002), 748 pp., £40.00.

Sir Edward Watkin, the 'Second Railway King', the 'Fighting Chairman', or more critically the 'Railway Machiavelli', has every reason to be the subject of a major biography. A buccaneering businessman and politician, he built up an impressive empire of railway interests, and if he did not create a large part of the network as George Hudson did, he certainly sustained his interest in it for far longer. He was also a controversial figure. In modern terms, he combined Robert Maxwell's bravado and abrasiveness with Richard Branson's negotiating skills, and there was also more than a hint of Geoffrey Archer's penchant for exaggeration. But above all, he was a warm, sympathetic manager with consideration for his staff who used a liberal hospitality to win people to his cause – a precursor of Sir Peter Parker, perhaps. Given the dearth of private papers, David Hodgkins has done a splendid job in chronicling the long and eventful career of one of the major business leaders of the nineteenth century. This is an authoritative account. The author, who published a preliminary article on Watkin and Grimsby parliamentary elections in the last issue of the journal (23 (2), September 2002), has clearly conducted a prodigious amount of research all over the country, and the rate of return is high.

After an unconventional and not entirely happy childhood, Watkin spent his formative years in the rich radical environment of reformist and Nonconformist Manchester, where his father, Absalom, introduced him to the major

figures of the 'Manchester school'. Having cut his teeth on the Trent Valley Railway as secretary (1845–46), he joined the London & North Western as one of Mark Huish's able lieutenants, helping that extraordinary manager to consolidate the merger that produced the leading company of its day. In 1853 Watkin struck out on his own and began a lifelong association with the Manchester Sheffield & Lincolnshire; he was also subsequently and heavily involved in the South Eastern and the Metropolitan, and a host of other railways, among them the Midland, Great Western, Great Eastern and East London. He was still a young man when he operated on a bigger stage, rescuing the Grand Trunk Railway of Canada from disarray and playing a part in Canadian confederation. Later he promoted the Channel tunnel, taking the project further than anyone else a century before it was finally constructed. Hugely influential as a railway figure, he was also full of paradoxes, as the book makes clear. He possessed prodigious energy and drive, yet was prone to stress-related illnesses and collapses. As a general manager, he made the unique step of combining the post with numerous directorships and a political career. This often produced contradictions. As Hodgkins notes when referring to the negotiations between the Oxford Worcester & Wolverhampton and the Manchester Sheffield & Lincolnshire in 1856, 'he was gentleman for one team and player for the other' (p. 136). Although he talked much of railway amalgamations, his activities tended to preserve his independence when a policy of merger was clearly more rational (as did his great adversary, James Staats Forbes of the London Chatham & Dover and Metropolitan District). In politics, he was always searching for the right seat, but could not shake off an involvement with bribery, while his views as a Liberal could be capricious. He favoured Conservative policies on Ireland from 1880, but operated largely as an independent, and, as Lord Radnor said of him in 1895, 'no one (not even himself) knew what his politics were'.

In this long book transport historians will focus on Watkin's role in the maturation of the British railway network

after 1850. They will find few surprises, since the ground in terms of company history has been covered before. However, Hodgkins steers a steady course through the labyrinth of railway politics and provides a more measured account of episodes which earlier historians have characterised in terms of betrayal and volte-face. Some criticisms may be offered, though one does so with humility, given the range and depth of this impressive biography. Hodgkins follows a strictly chronological treatment, and readers are asked to move in fairly rapid succession from the 'railway' to the 'political' to the 'personal' and back again. This approach may be defended because it captures the complexities of Watkin's daily battles on many fronts, but it is often hard to follow a subject through to its resolution, and some subjects, for example, his influence in Canada, might have been assembled together in one chapter. Demands are certainly made of the reader with the more complex railway negotiations, and at times there is an obsession with detail, not all of which is consequential. A little more on Watkin's business achievement would be welcome, especially over the longer run, as would his part in exposing Turner's 'defalcations' on the Great Eastern, together with the printed correspondence, *Great Eastern Railway December 1872*. He took on railways in distress, often produced an improvement to the bottom line through a mixture of increased turnover and reduced costs, but his ducks were less lame than those of James Forbes, and some challenges proved beyond him – the Erie and the Grand Trunk, for example. Hodgkins is sometimes unduly sympathetic to his subject. For example, Watkin's silly proposal that railway company balance sheets should be published monthly escapes criticism (p. 130), and some of the vitriol he attracted from enemies and supporters alike is left out. Opposition was particularly strong when Watkin got his son Alfred on to the MS&L board in 1875, and there was evidence of paranoia on Watkin's part when he sought election in Exeter in 1873.

These minor criticisms aside, this is an immensely impressive book. Watkin

the man emerges as never before, with fascinating insights into his personal and political world. And we are given a heightened sense of the challenge of maintaining competitive railways in the charged environment of the later nineteenth century (the sections on the squabbles in the south-east and in the 'more difficult' 1880s are particularly welcome). Watkin, 'Nimble Ned', a master of railway diplomacy, outsmarted Huish, dominated half a dozen boards and was only effectively resisted by Forbes, with whom comparisons are rightly made. He was a singular man with an astonishing career, but at the same time, as the author notes, he was 'an opportunist without a detailed blueprint'. This is a book which all who are interested in Britain's railway history will want to read.

Terry Gourvish, London School of Economics and Political Science

Alfred C. Mierzejewski, *The Most Valuable Asset of the Reich: a history of the German National Railway, Volume 2, 1933–1945*, University of North Carolina Press, Chapel Hill NC and London (2000), 270 pp., US\$45.00.

During the first half of the twentieth century, international politics and German railway management were closely intertwined. The Deutsche Reichsbahn-Gesellschaft, Germany's nationwide railway company, was purposely set up as one of the objects of financial desire for the Allied victors of World War I. Under this monetary pressure, the Reichsbahn leadership streamlined operations by using some of the most modern accounting and data processing techniques of the time while expanding service and increasing the speed of operations. In other words, Hitler did not need to make the trains run on time when the Nazi party assumed power in 1933. But how exactly did the Reichsbahn fare under the Nazi dictatorship? This is the central question of Mierzejewski's detailed and informative book, a sequel to his history of the German railway from 1920 to 1932, which was reviewed in the *Journal of Transport History* in 2001 (22 (1))

Based on a broad array of sources, the author argues that the Reichsbahn was able to attain a surprising degree of independence from the totalitarian regime. This is all the more astonishing since the transport of people and freight in Nazi Germany relied overwhelmingly on the railways. The economic recovery of the country and the rapid build-up of the armament sector demanded more trains and faster circulation from the Reichsbahn, and the railways delivered. Their operations even kept pace with the aggressive war of the Nazis, at least in the beginning. It seems that precisely because the railway performed relatively smoothly, the Nazi elite left its management alone, while the Reichsbahn leadership itself displayed a mixture of submissiveness in the political realm combined with pride over its technical achievements.

Thousands of Reichsbahn employees lost their jobs because the regime classified them as 'non-Aryans', but relatively few party representatives became members of the railway's governing board. A bureaucratic culture and institutional inertia help to explain this phenomenon. It also seems that the Nazi leadership, and especially Hitler himself, were not particularly interested in the Reichsbahn. For them, the technological icon of the pre-war Nazi years was the culturally wonderful but economically pointless *Autobahn*. By building roads, the Nazis sought to 'jump start' the automotive sector, so they gave them the full backing of Nazi propaganda and presented them with an aura of technological modernity which the railways could not match. What is more, the regime forced the Reichsbahn to contribute money and civil engineers to the construction of the *Autobahnen*.

This characterisation of the Reichsbahn is enriched by Mierzejewski's portrayal of its general director, Julius Dorpmüller, as politically ineffectual and lacking in vision. In Mierzejewski's view, Dorpmüller was the quintessential technocrat who made sure that the tasks assigned to his railway were carried out without any derailments. This quality did not serve him too well in the confusing political climate of competing agencies, obscure distribution of power, and the

general atmosphere of intrigue which dominated decision-making in Nazi Germany. Even Dormmüller's position as Reich Transport Secretary did not solve this structural problem.

The Reichsbahn began to offer high-speed services between selected cities and Berlin by the mid-1930s; yet these were the result of Weimar-era planning by a small group of railway engineers and they were not expanded. As far as accounting was concerned, the Nazi Reichsbahn, no longer under pressure from the Allies, resorted to less transparent practices.

Mierzejewski also describes the growing transport problems during World War II. They escalated into a veritable railway crisis by 1942 which was only solved by a realignment of power under economics supremo Albert Speer. His efforts included a standardisation programme to reduce the many different types of locomotives and a speeding up of their production. These locomotives were also, of course, used to carry some three million European Jews to the gas chambers; the railway was indeed an essential part of the Holocaust. According to Mierzejewski, the Reichsbahn's bureaucratic and technocratic stance led its engineers and managers to view these inhuman 'transports' as just another task to be carried out like all the others. In the author's opinion, antisemitic prejudice was not required for the Reichsbahn to participate in the Holocaust – plain moral indifference sufficed.

In sum, this is a most valuable book. With Mierzejewski's first volume, it comprises the first comprehensive history of the modern Reichsbahn in English. It greatly expands historians' knowledge of this enormous railway company and its political role, while skilfully summarising the literature. The focus remains on the relationships between national politics and railway management. Other scholars working on similar issues will benefit from the analyses presented here. For depth of coverage and attention to scholarly detail, Mierzejewski's volumes will remain the standard work for some time to come.

Thomas Zeller, University of Maryland,  
College Park

Jonathan S. McMurray, *Distant Ties: Germany, the Ottoman Empire, and the construction of the Baghdad Railway*, Praeger, Westport CT (2001), 156 pp., £53.90.

Using unpublished private papers of the Baghdad Railway Company, the Deutsche Bank and the German Foreign Trade Division, amongst other sources, this work sets out to explore German and Ottoman interpretations of the railway and its role in their political interests, as well as its effect on their mutual relations. Previous historians have offered the views that the railway was a means of German political and economic exploitation of the Ottoman Empire, that the incentive of unlimited natural resources enticed Germany (Pohl); that the railway was intended to compensate for Germany's late involvement in imperial ventures (Mulmann); that it had the insidious purpose of enslaving the Ottomans (Meade Earle); and that it was a vehicle of monopoly capitalism (Rathmann). McMurray, however, tends to the conclusion that the railway worked more to the advantage of the Ottomans and subsequently the Turkish Republic, than the Germans, partly through astute Ottoman policy, and partly through the force of circumstances of the First World War.

McMurray sees the railway as emerging from an idealistic and largely cultural German interest in the Ottoman Empire, which fostered the belief that Germans could personally reverse Ottoman decline, one means being through a railway that connected Istanbul with its distant provinces in Anatolia and Mesopotamia. At this point problems of understanding emerge, as the author speaks of Europeans managing everything in the Ottoman Empire and obstructing reform, perhaps not sufficiently questioning the views in his original sources. For example, the Ottoman Public Debt Administration, though managed by Europeans, followed a financial policy that was dictated by Ottoman views of Ottoman interests.

If German aims on the railway were idealistic and confused, Sultan Abdul Hamid saw possibilities of acquiring

European capital from a country with no obvious territorial ambitions (or opportunities for them). McMurray places much emphasis on the role of individuals in Germany's adoption of the railway policy, but he himself gives the more likely cause in the fall of the hard-headed Bismarck (uninterested in the railway) and subsequent flowering of Wilhelm II's dreams of glory. Another obstacle was removed when the British became embroiled in the Boer War.

In 1899 the Sultan agreed to the railway provided it was Ottoman property and funded by both government loans and operations contracts. A contract was signed in what the author terms 'a new spirit of inter-cultural collaboration', but, unsurprisingly, given the financing, was only 10 per cent complete eight years later – which is perhaps why the author fails to give attention to the way in which it was perceived by the British. The noble endeavour of Germany reviving Ottoman fortunes, to which McMurray gives rather more credence than it deserves, apparently persisted after the Young Turk revolution of 1908. Whereas both Ottomans and Germans saw commercial advantages in the railway, the Ottomans gave priority to strategic concerns, which became apparent when they declined to route the railway through Alexandretta. The company was forced to recognise its growing dependence on the Ottomans to see the project through, whereas the Ottomans feared that Germany was loaning the Empire into bankruptcy. The problems of the railway were also compounded by the difficult working conditions, which included illness, and the round-the-clock tedium of tunnelling. By 1914 the railway was nowhere near the Gulf, and Germany had been forced to accept that the British would only permit its progress if it never achieved its end.

McMurray, who has a persistent vision of the Ottomans as subservient to European governments, argues that the First World War made them equals. The war began well for the alliance, with the Ottomans, as ever, holding the clearer objectives, determined to use German interest in the railway to support their

own goals. By 1915 the enterprise was suffering deeply from financial problems, and not even the forced labour of British prisoners of war could overcome the disadvantages of lack of supplies. The enterprise in effect ended when the British took Baghdad in 1917. In the end, states McMurray, the railway was of minimal strategic value. The war impeded its construction as much as its unfinished section impeded the war. Germany got nothing from it, but it did increase the political security of Anatolia, encourage economic development, and assist Atatürk in his nationalist campaign.

The study suffers from an over-focus on the particular topic and a lack of understanding and knowledge of the Ottoman background, and Great Power politics in the region. It tends to meander by meticulously tracing changing relations year by year, but failing to establish underlying themes and trends in the interests and objectives of the parties involved, which would help the reader understand some of the apparent inconsistencies in policies. It would also have been illuminating to be told more about German railway policy in general at this period, and how railways were viewed at a time of the emerging significance of oil and road transport. However, McMurray does offer a detailed and balanced account, which credibly emphasises the Ottoman contribution and the greater pragmatism in objectives which enabled them to gain the ultimate advantage. He also contributes much, both to knowledge of the shifting complexities of Ottoman–German relations and to that of the problems involved in the construction of railways at this period.

Vanessa Martin, Royal Holloway,  
University of London

James W. Ely Jr, *Railroads and American Law*, University Press of Kansas, Kansas KS, 376 pp., US\$39.95 (£33.50).

It is no enviable task to review a work of academic history which, as the author candidly admits in its first passages, does not offer an integrated vision of its subject matter. In the prologue to *Railroads*

and *American Law* Professor Ely declares an aversion to 'grand theories' about historical data, and a similar reluctance 'to impose a thesis on the intricate and sometimes contradictory legal history of railroading' (p. viii). In place of sustained argument readers are presented with a chronological survey of the interface of some American railroad companies and some American laws from the inception of the railroads in the 1830s to their apparent decline after the Second World War. Professor Ely's study brings to mind what another reviewer wrote of another book, that on the kindest reading it should be regarded as 'a useful compendium of facts'.

To be sure, *Railroads and American Law* covers a lot of historical ground. Its thirteen chapters describe a wide variety of legal problems as they arose in the context of railroad organisation, land grants, commerce, insolvency, taxation, and liability for personal injury, among many other subjects. Students and scholars in search of points of entry into the copious American historiography of railroad law will do well to start with this book. The book will also provide a reliable primer to the legal character of railroads as companies, and to some of the major legal conflicts engendered by their emergence, development and operation. The book works less well, however, when considered either as a thematic treatment of the history of American railroad law, or as a series of interrelated historical essays. While Professor Ely purports to be disdainful of 'grand theory', in fact each of his chapters advances a point of view – if only subtly and discursively – about how we should think about the place of railroad corporations in American history.

In the years following the Civil War, the author observes, railroad companies that had been promoted to realise local and regional aims were swallowed up by eastern-based financial conglomerates serving, seemingly, no masters but private power and profit. In this era, American railroad companies and their 'robber baron' owners came to be roundly feared, even despised, for (what were seen as) predatory commercial and labour prac-

tices. Professor Ely reports that by the 1890s 'many observers' believed that the new railroad leviathans had come to exert so much political power that they 'threatened the very basis of republican government' (p. 84). The author himself, however, appears not to share this view. In this and a number of other instances, Professor Ely takes the position that critics of late nineteenth-century railroad corporations have consistently exaggerated their wickedness and underestimated their virtue.

This is a telling aspect of Professor Ely's book. For while its author professes theoretical and political disengagement from his subject-matter, his text exhibits a persistent (if strangely oblique) revisionism of those historians who have excoriated the political and economic behaviour of American railroad corporations. The third chapter of the book, by way of example, concerns railroad regulation in the nineteenth century. After noting that 'many observers' have argued that railroad companies routinely abused their monopolistic position (in the setting of freight rates, for example), Professor Ely suggests that 'railroads were often treated as a scapegoat', and that '[m]uch of the antagonism toward railroads was prompted less by specific complaints than by unease about the sweeping economic and social transformation of American life' (p. 84). In the opinion of this reviewer, the problem with such a statement is not only that it reads like an *apologia* for the railroad companies, but that in terms of evidence and analysis it is as arbitrary as the judgments it seeks to qualify or overturn.

The same cursory revisionism is also apparent in Professor Ely's treatment of the performance of judges, federal judges particularly, in railroad litigation. In the late nineteenth and early twentieth centuries, railroad companies launched a series of full frontal legal assaults on government regulation. Their main siege engine was the due process clause of the Bill of Rights. True to form, Professor Ely faithfully reports that many legal historians have criticised the federal judiciary in this period for having 'constitutionalised'

corporate property interests at the expense of public-minded and democratic regulatory initiatives. Ely reports these criticisms, but does not elaborate them. Nor does he endorse them. In Ely's view, the legal counter-attacks of the railroad companies actually deserve credit for having made 'a pivotal contribution to constitutional law by gaining Supreme Court acceptance of the premise that due process imposed substantive restraints on government power over private property' (p. 96). And while some scholars have had 'harsh words' for judicial review by the Supreme Court, and more particularly for the ideological mainsprings of its judgments, Professor Ely applauds the Court for its robust utilitarianism. Like a panel of sensible supply-side economists, the 'Court recognized the vital importance of investment capital in order to achieve economic growth' (p. 98).

With other previous legal historians, Professor Ely is quite sure that 'American law in the nineteenth century was preoccupied with the encouragement of economic growth, and that legal rules were altered to foster commercial enterprise' (p. 134). Unlike some of his predecessors, however, Professor Ely is equally sure that this was a jolly good thing. The main difficulty here is that *Railroads and American Law* is disdainful of the legal, economic and political theory that would be essential to any meaningful evaluation of such issues. Professor Ely's generalisations about law and American railroad capitalism, such as they are, are based almost wholly on a perfunctory presentation of secondary sources and some court cases, both shorn of their contiguous economic, political or social context. As for the parallel legal histories of railroads as they unfolded in Britain, Canada or Europe, these are simply ignored. There is a final disappointment: readers will search in vain in these pages for contact with some flesh-and-blood human characters. The great railway barons, corrupt (or incorruptible) legislators, and assorted judicial eminences who made the legal history of American railroads are given only the most scant personal attention. As for the legion of American lawyers who came to earn their living off

railroad company treasure, it is as if they had never existed.

R. W. Kostal, University of  
Western Ontario

Peter Wollen and Joe Kerr (eds), *Autopia: Cars and Culture*, Reaktion, London (2002), 400 pp., £25.00 (US\$39.95).

This lavishly illustrated and well produced anthology is a slightly unusual mixture: reprinted 'key texts' by (among others) Roland Barthes, Marshall Berman and Jane Jacobs are combined with newly commissioned essays from an impressively eclectic range of contributors to cover a very ambitious spread of automobile themes and issues.

The collection is one of the first substantial works to approach the automobile in culture not as wholly good or (what has been much the most common viewpoint in recent years) wholly bad but as a cultural product located in and expressing the preoccupations and perceptions of the society that produces and uses it, and that cannot be understood apart from that context. The 'cars and culture' subtitle is important in indicating this volume's intended audience, and historians should take note. Those looking for studies of the economic or business history of the car, for pages of charts, tables and graphs, for statistical comparisons of international markets and social studies of rates of take-up across different communities will come away disappointed. This is a survey of the car and culture, and the car in culture: it is motoring as a technological, social, geographical and imaginative activity located in the structures of meaning that human society has erected around it and which it has contributed to shaping.

The volume is organised in four sections: 'Cars in culture', 'Cars and capital', 'Motor spaces' and 'Myths and motors'. All four sections have some essays of excellent quality but for this reviewer only 'Motor spaces', dealing with roads, cities, traffic and the space of the car itself, achieves real coherence. Here, however, a large proportion of the contributions are reprints from well

known works by Marshall Berman, Jane Jacobs and Jane Holtz Kay and – with the exception of Murray Fraser's and Joe Kerr's essay 'Motopia: cities, cars and architecture' – the new material does not stand up well to comparison with the old.

The other sections are very uneven and – perhaps inevitably, given the vagueness of their alleged organising principles – lack coherence. 'Myths and motors' is particularly loose and unsatisfying; it seems a shame to use space reproducing Barthes's easy-to-find essay 'The new Citroën' from *Mythologies* rather than coming up with something new, and this perhaps expresses a certain lack of confidence on the part of the editors with this part of the collection. Of the new essays in this section only Grace Lees-Maffei's thorough and robust 'Men, motors, markets and women' says anything very illuminating. 'Cars in culture' starts well with Peter Wollen's 'Automobiles and art', an essay which responds with intelligent discrimination and a clear structure to what is by any standards an impossibly broad brief. Two essays dealing with cinema, David Pascoe's 'Vanishing points' (richly rewarding but too short) and A. L. Rees's 'Moving spaces' (a gem), are among the best pieces in the book. The next section, 'Cars and capital' is at its best when dealing with the less familiar: Geremie R. Barmé's essay on car cultures in China and Adrian Oñoiu's extraordinary piece on the car in Romanian culture stand out. Otherwise there is some good material here but overall the section lacks a clear agenda.

Two aspects of this book deserve unambiguous praise. The first is the high standard of production at what now must be recognised as a comparatively reasonable price. The typography is unfussy and clear, and mercifully free of misprints and other errors, the book is well laid out and excellently printed and bound. The other is the illustrations, which are imaginatively chosen, immaculately reproduced and intelligently placed in relation to each other and the text. There are over 300 illustrations in this book, 131 of them in colour; and not

a single one of them does not work for its living.

Ralph Harrington, University of York

John Armstrong and Andreas Kunz (eds), *Coastal Shipping and the European Economy, 1750–1980*, Zabern, Mainz (2002), 276 pp., £35.00.

In this collection, John Armstrong and Andreas Kunz have assembled an informative set of essays representing the revised proceedings of a workshop on European coastal shipping held in 1997. Six years later, the aims of the conference remain as impressive now as they were extensive then. By assessing the contribution of coastal shipping to European industrialisation and urbanisation, it is the express intention of the editors to invigorate a subject traditionally overlooked by maritime and economic historians. Indeed, the great strength of this work is that it is rather more than a stitched-together compendium of disparate parts. The volume has a flexible core methodology, demonstrated in the following three areas: the importance of consistent definition (separating domestic and internal trade and *cabotage* from short-sea, overseas and blue-water traffic); the impact of official regulation and intervention; and the creation of reliable and transferable long-run statistical data. This methodology is developed in Armstrong's adroit summary of British coasting. The author argues persuasively that the cost effectiveness of high-bulk, low-cost coastal traffic, the development of steam and the passenger trades, and the impact of inter-modal transport can be extended into a 'research agenda' that serves to inform subsequent work.

What follows is a series of regional and temporal cross-sections moulded by these initial premises. Given the recent explosion of literature, it is hardly surprising that attention focuses primarily upon the Baltic and North Seas. In charting the changing structural basis of Danish shipping between 1750 and 1914, Hans Christian Johansen indicates two core themes: the problems of measuring coastal shipping in contested domestic

waters and the continued centrality of coastal transport in the face of strong sectoral competition. In a rather more statistically robust analysis, Olle Krantz links the performance of Swedish coasting with that of railway traffic in the later nineteenth and twentieth centuries. This is also a concern for Yrjo Kaukiainen, who, developing Jari Ojala's excellent reconstruction of pre-industrial Finnish coastal shipping 1750–1850, argues that the modernisation of coastal shipping was located in passenger and premium-rate goods traffic on steam lines. As this tended to compete with existing overland routes and later to suffer from aggressive railway development, steam traffic did not impinge upon the survival of 'peasant' or 'traditional' modes of carriage that retained their transport hegemony over bulky, inexpensive primary products. Although less driven by statistical imperatives, two further essays – Daniel Rabuzzi's analysis of Mecklenburg and western Pomerania 1750–1830, and Ortwin Pelc's overview of Hamburg in the nineteenth century – indicate how the overlapping levels of coastal and short-sea shipping contributed to maintaining a sophisticated and integrated maritime economy in the Baltic.

The transition from sail to steam and the consequent reconfiguration of coasting figure prominently in the collection. Gordon Jackson's well crafted alliance of quantitative rigour with qualitative illustration animates the story of Scottish steam shipping, whereas Antonio Gómez-Mendoza successfully illuminates Spain's relative economic backwardness in the late nineteenth century through a detailed examination of coastal traffic. Here the cost benefits of coasting in the long-distance trades were emphasised by erratic State intervention and the peculiarities of the structural development of a railway network focused on Madrid. In the twentieth century Jesús M. Valdaliso argues, strategies of resource pooling and freight manipulation fostered a burgeoning coastal tramping and steamship liner industry. This boomed in the 1940s until stagnating under pressure of inter- and indeed intra-modal competition, internal business torpor and insufficient

capitalisation by the later 1960s. A similarly stunted economy is also revealed in Andrea Giuntini's brief overview of coastal shipping in post-Unification Italy. Despite massive State intervention, coasting remained conservative in technology and practice, with sail predominating at all ports up to 1914. Indeed, in the peripheral south the lack of investment in transport infrastructure meant that coastal shipping remained the default mode of long-distance goods and passenger transport throughout the period. Elsewhere, Greta Devos supplies an interesting study of Belgium between 1879 and 1914 and the domination of its Antwerp-based short-sea shipping routes by foreign carriers; Peter Voss uses an extensive survey of maritime records to unpick Bordeaux's *grand* and *petit cabotage* in the eighteenth century; and Elena Frangakis-Syrett argues that the pre-industrial Ottoman Empire cohered because of its extended coastal links – links that fostered agrarian specialisation, urbanisation, monetisation and the spread of credit.

Despite much excellent work, there are criticisms. As the editors admit, the geographical coverage is patchy and major maritime economies such as Ireland, the Netherlands, Portugal and nineteenth-century Greece are omitted or simply mentioned in passing. In addition, historians of the later twentieth century will be disappointed. Apart from Valdaliso's essay and Krantz's later projections, there is little beyond 1914. Having said that, the collection introduces much new research, fresh perspectives and important long-run data. As such, it richly deserves its place among the shelves of serious scholars of maritime, economic and transport history.

David Hussey, University of  
Wolverhampton

L. T. C. Rolt, *The Landscape Trilogy: the autobiography of L. T. C. Rolt*, with an introduction by Sonia Rolt, Sutton Publishing, Stroud (2001), £25.00.

L. T. C. (Tom) Rolt is still quite widely read as a historian of British industrial-

sation and for his biographies of several of the leading engineers of the late eighteenth and nineteenth centuries. He was also one of the pioneers of the movement which from the early 1950s saw amateurs taking over redundant railway lines in Britain and running them for leisure purposes – what became the present-day heritage railway industry. Rolt was also a key advocate in the immediate post-war years for the retention of the largely moribund system of inland waterways, although here serious disagreements with other leading figures in the Inland Waterways Association (of which he was a founding member) reduced his influence for many years. A lifelong interest in vintage cars and industrial archaeology were other examples of the many and varied aspects of Rolt's life, with a strong transport connection.

All these aspects are covered in this welcome reissue, but the real value of Rolt's autobiography lies in the opportunity to understand how these concerns fitted into his philosophical and political views on the nature of industrialisation. A thinker in the tradition of people like the English ruralist and critic of mass production H. J. Massingham, Rolt was a man fascinated by the ingenuity of engineers and the potential of the machines they developed, yet increasingly disenchanted with the standardised and bureaucratised world to which they contributed. This book includes all the text from the original three volumes (the first published in 1971 while Rolt was still alive, the others posthumously, in 1977 and 1992), but not all the photographs are the same. Otherwise the volume is a straight reprint, retaining the original pagination and different type-faces, plus a brief introduction by Rolt's second wife explaining the background to Rolt's decision to write about his life and the subsequent history of publication. There is no index. Anyone fortunate enough to have the original volumes will find little need for the reissue, but otherwise this is a handsome package, reasonably priced and near essential – and enjoyable – reading for anyone interested in the history of the public history

of transport in Britain.

Colin Divall, Institute of Railway Studies and Transport History, York

Ari Kelman, *A River and its City: the nature of landscape in New Orleans*, Berkeley and Los Angeles CA, University of California Press (2003), 310 pp., US\$29.95.

The relatively new discipline of 'environmental history' has a great deal to offer historians of transport. Historians, geographers, sociologists, cultural theorists and others have pioneered an integrative approach whereby urban and planning history, the history of landscape, aspects of economic and industrial history and social and political approaches have combined within a context shaped by a concern with the interactive and constantly changing relationship between human societies and the environment in which they live. A historical approach that recognises the constantly fluctuating dynamics governing the interaction within such relationships is inevitably going to concern itself centrally with systems of movement, mobility, circulation and exchange, and thus with transport. Scholars from the United States have tended to lead the way in this area, with the work of Mike Davies on Los Angeles and William Cronon on Chicago being notable examples. Now Ari Kelman has joined the front ranks of scholarship in this field with a brilliant study of the dialectic between the city of New Orleans and the Mississippi river.

Ari Kelman's fascinating account of the relationship between New Orleans and its waterfront is a model of this kind of history, not least for the way in which transport is considered as a system embedded within other systems rather than as a self-referential closed system in its own right. The foremost illustration of this approach is naturally the place of the Mississippi itself and its traffic in Kelman's account. Kelman analyses the paradoxical story of a great riverine city that turned its back on its river. Built upon drained marshlands, squeezed between the Mississippi and Lake Pontchartrain,

New Orleans flourished by keeping the waters of the river in their place, hidden behind dockyards and railroad tracks, constrained between the great earth ramparts of the *levée*. This paradox worked itself out through floods, destruction and disease as well as through the production of commerce, wealth and civic pride.

Kelman takes the history of the city's relationship with its river from the early nineteenth century, years in which the landscape between New Orleans and the Mississippi was literally formed both geographically and conceptually, to the revived, heritage-themed waterfront – 'more a commercial carnival than an idealised public space or riparian wilderness' (p. 216) – of the early twenty-first century. These two chronological extremes mark periods in which the city was connected with its river, in which New Orleanians could lay some claim to the waters of the Mississippi as a public recreational space and an integrated element of their civic environment. For much of the period between, however, commercial development and the politics of the city's elite denied New Orleans any relationship with its river other than one of exploitation and fear. Transport was a key factor in this developing relationship, as steamboat traffic brought extensive development of the waterfront under the auspices of the Dock Board, creating a privatised commercial space that was then occupied by the railroads. At the same time a chaos of fragmented uses and jurisdictions was replaced, by the early twentieth century, by a unified commercialised presence that dominated the waterfront, 'a progressive landscape integrated under the control of a single body of elite experts' (p. 150), walling New Orleanians off from their river with vast quays, sheds and expanses of railroad track. Finally, the planned riverfront expressway of the 1950s represented simultaneously the triumph of motor traffic over considerations of the civilised use of urban space and a culmination of New Orleans' century-old tradition of putting every construct it could, both ideological and actual, between itself and its river. In this case, however, a new consciousness of

civic values powered a protest that succeeded in saving the waterfront – although a spur of the expressway was driven through, and devastated, the historically and culturally rich African-American community of Claiborne, which could not muster the public sympathy or political influence to save itself.

Kelman's account is fundamentally chronological, but possesses great (but lightly worn) analytical depth and learning as well as an unusual degree of coherence and narrative power. Solidly based on a remarkably wide range of source material at every stage, elegantly written and filled with insight, this is a book that can be recommended to anyone interested in the intersections of humanity and landscape, city and river, stability and mobility.

Ralph Harrington, University of York

G. Blauwens, P. De Baere and E. Van de Voorde, *Transport Economics*, Antwerp, De Boeck (2002), 475 pp., €62.00.

It is easy to see that this general textbook on transport economics does not stem from the Anglo-American tradition. The cover page illustrates sea, air and rail transport; not a car or truck to be seen. It is Flemish-published and also refers to a number of Dutch sources, so it represents transport economics with a distinctly Low Countries flavour. An equivalent course in a British university would normally use the texts edited by Kenneth Button or Kenneth Small, and much of the recent literature in this tradition has been dominated by discussion of privatisation or deregulation. In this respect the Blauwens volume is a refreshing change: the authors are not afraid of the public sector, and the book represents a position more typical of EU transport policy.

The explicit purpose of the volume is to combine in a handbook the four main perspectives on the subject, namely the organisation of the industry, management tools in transport, the basic economics of transport from a more macro-economic point of view, and the range of policy tools available in transport. Each part is

meant to be self-contained. In places there is serious use of mathematical techniques – Poisson distributions and queuing theory, optimal taxation and second-best policy, and Lagrangian constrained optimisation techniques – but these can be treated as optional by the less mathematically inclined reader.

The multi-authorship is reflected in different styles in different parts of the book. Some sections dive into demanding formal analysis, but in the main the conceptual ideas are developed using fully worked out arithmetical examples, generally calibrated on Flemish or Dutch data. This reviewer found the most successful parts of the book were those on management techniques and on charging for external costs. In other sections, some of the diagrammatic summaries of basic theory are a little too basic and the contrast in style and technical difficulty is striking.

There is a useful specialised bibliography at the end of each chapter, and given that use is made of several Flemish and Dutch sources, one of the volume's achievements is to act as a channel for transport management and modelling literature from the Low Countries. Unfortunately this reviewer found that a lot of the bibliographical material was quite old and relatively little effort has been made to include literature after 1997. The principal limitation of the volume with reference to this journal, however, is that there is little reference to historical material or context. The macro-organisation and trends within the European transport industry are covered from about 1970, and evolution of the European regulatory framework refers mostly to a similar period. The volume will serve as a useful addition to a reading list for academics wishing to familiarise themselves with Europe and formalise their transport economics course; but the reader will look in vain for anything before the Second World War. A modern book tracing the full long-run comparative history and evolution of European transport policy is still awaited.

Graham Crampton, University of Reading

Gerry Beale, *The Weymouth Harbour Tramway in the Steam Era*, Didcot, Wild Swan Publications (2001), 94 pp., £14.95.

Little more than a mile in length, the Weymouth Harbour Tramway in the south of England is one of those railways that excites a seemingly disproportionate amount of attention from the enthusiast fraternity. Its attractions are chiefly those of the slightly bizarre: full-sized boat trains reduced to a crawl as they work along the tortuous route through Weymouth's back streets and along its quaysides, bringing with them a whiff of metropolitan sophistication and something of the excitement of holidays in the Channel Islands and France. These connotations aside, for over a century the tramway was an important passenger and freight link; historically, goods traffic was perhaps the more important in social and economic terms, thanks to the speedy conveyance afforded vegetables and other fresh produce heading for the industrial heartlands of the Midlands and the north of England.

This slim volume is aimed squarely at the enthusiast and local historian. It does, however, contain some material of interest to academic transport historians, although it should be read in conjunction with John Lucking's *The Weymouth Harbour Tramway*, published by OPC in 1986 and regrettably out of print. A brief account of the tramway's rationale and development in the nineteenth century is followed by longer sections on subsequent events up to the final take-over by diesel traction in 1966. There is also a short chapter on the tramway locomotives and the steam vessels plying the short-sea crossings. Apart from the ships, most of this is to be found in Lucking's study but serves as context for the book's great strength, namely the photographs and maps reproduced to this publisher's usual exemplary standards. A good proportion of these illustrations are from between the world wars and earlier, although understandably some of these images are not as sharp as the later ones. The railway and the harbour are visually set in the context of each other and of

Weymouth itself, although there are plenty of close-ups for those whose interests lie more in the detail of hardware. As a visual record of the long gone but once important interface between railways and short-sea shipping it is a delight.

Colin Divall, Institute of Railway Studies and Transport History, York

Alan Bennett, *Great Western Lines and Landscapes*, Cheltenham, Rumpast (2003), 96 pp., £14.99.

*Great Western Lines and Landscapes* brings a novel perspective to our understanding of the public image of the Great Western Railway. Alan Bennett's exploration of the GWR's extensive publicity output between 1900 and 1940 focuses particularly on the inter-war years, a time when the company's approach was particularly dynamic. It highlights the importance of the role of publicity within a modern railway company, analysing the GWR's promotional output within the contemporary social, cultural, economic, political and topographical contexts.

By emphasising and analysing the GWR's marketing strategy, especially as expressed through its literary perspectives, this book makes a significant and original contribution to its field. Bennett's discussion of the GWR's literary initiatives reveals the extent to which the company's publicity material went beyond simply promoting tourism to engage with contemporary values of empire, the rural landscape and 'Englishness'. The argument is well evidenced throughout by extensive use of primary sources in the form of GWR booklets, company magazines, posters and other material. The book is richly illustrated, which is essential given the highly visual nature of much of the material considered, and well produced and laid out. Bennett's well written and accessible text is organised around six themes: 'imagery and enterprise', 'the Ocean Coast', 'selling America', 'western wonderlands', 'industrial interests' and 'the Holiday Line: post-war perspectives'.

The GWR's approach to selling its image is presented in terms of the range

of initiatives and imagery used by the company to associate a strong commercial identity with its key holiday markets in the south-west of England. The company's introduction of a series of publications (e.g. the *Holiday Haunts* annual handbook) to accompany its services was a key element in its public relations strategy, and this body of material is returned to throughout the book, and related to all subsequent themes. The GWR was popularly identified as the 'Holiday Line' in the 1930s, with its preponderance of seaside and family resorts on the 'Ocean Coast' of Cornwall and Devon, and its hierarchically formulated approach to its holiday resorts is discussed in terms of the integration of resort and railway aims.

Whilst the publicising of a railway company was obviously directed at the travelling public of its own country, the GWR also cast its net to a geographical market much farther afield, notably to the United States. The author illuminates the role of Oxford, London and the Wye valley as places of pilgrimage for American tourists keen to explore English heritage and landscape. In effect this international marketing was not just of a railway but of Britain itself. Beyond the south-western holiday resorts Bennett discusses the GWR's marketing of the landscapes of Wales and southern Ireland. The GWR's industrial interests are also given consideration, counterbalancing the dominance of publicity for passenger services. Again, the correlation of railway activity and the region's economy is highlighted, as the commercial support system offered by the GWR was instrumental in assisting economic development in the south-west. Popular focus on the GWR has tended to be concerned primarily with aspects of passenger holiday traffic, and Bennett offers an important corrective with his discussion of the role of goods traffic. Finally, in a return to the theme of holiday traffic, the post-war perspective of travel is discussed within the context of an altered social situation. Amongst the forcible transformation of the inter-war idyll, perceptions and representations of different resorts changed with the advent of post-war reality.

The author has, throughout this book, evaluated the GWR as an example of innovative literary travel marketing, with direct interaction between the railway and the wider community. Whilst reading beyond homage to nostalgia, this is a book which can successfully appeal to and satisfy different levels of interest and enthusiasm. The book makes an important contribution to its historical field in general by placing the GWR and its publicity policy within a wider social historical context. The combination of in-depth information and the extensive illustration of examples of publicity booklets, leaflets and so on make the book a valuable source, suitable to varying levels of interest in and existing knowledge of the subject. It is a well produced and rewarding volume that should appeal to a wide readership.

Rachel Holland, Institute of Railway Studies, York

Barbara Young Welke, *Recasting American Liberty: gender, race, law, and the railroad revolution, 1865–1920*, Cambridge, Cambridge University Press (2001), 430 pp., £45.00 (US\$64.95).

While historians have long studied railroads, only recently have they explored beyond the right of way and the boardroom into the broader social and cultural effects of railroads and the industrial society that they spawned. Barbara Young Welke has added an important work to this movement by looking at gender, race, and law, and how railroads changed these areas. Her central argument is that railroads fundamentally reshaped the way that Americans of all races, classes, and genders conceived of liberty. She asserts that, before the widespread use of railroads, Americans defined liberty in terms of personal independence, self-reliance, and autonomy. With increasing industrialisation, symbolised and analysed through railroads, both steam and street, this definition changed to one mediated by the State. To ensure liberty in this new technologically sophisticated industrial society, Welke maintains, individuals increasingly called on the government.

Liberty was no longer individual independence but more focused on life itself, even if that life had to be protected by safety devices and regulations. She comes to this conclusion by looking at injuries to railroad passengers. Through dozens of individual narratives drawn from court records, Welke concludes that before 1870 most injuries were treated as unfortunate accidents that were the price of maintaining personal liberty in an industrialising society. By 1900 injuries were increasingly viewed as the responsibility of not only the injured party but the railroad company itself. The groups that were at the forefront of this change in the definition of liberty were, ironically, the least free: women and African-Americans.

Gender and race are central elements of Welke's argument. Women, severely restricted in both law and custom during the late nineteenth century, were nonetheless passengers on both steam and electric street railroads. When these women were injured, their dependent status in society translated to preferential status in the courtroom. While men were expected to be able to jump from moving trains or streetcars, women who did so, and were injured, were viewed sympathetically. Women were in the vanguard of the new definition of dependent liberty for a new industrial age. Race, most specifically the Jim Crow laws of the southern states, is also ably dissected by Welke. The segregation of rail cars was more than simply a way for southern whites to reinforce traditional notions of status but also a way to put a traditional cast on a potentially threatening new technology. The railroads did not welcome the many Jim Crow laws throughout the south, a point that Welke makes clear. Not only were the laws an operational headache, but they also represented increasing governmental interference in the railroads' business.

This work is at its best when analysing gender and its impact on the law. There is much to recommend here but, unfortunately, there are also some problems. While Welke sheds new light on the intersections of gender, race, and law, her understanding of the history of technology is less informed. She mentions

many works in the footnotes but she does not seem to adopt any particular theoretical approach. Her knowledge of railroad history and technology is less than complete and relies on a few secondary sources. At times, in her account, railroads are merely a 'black box' that impacts upon helpless women and others rather than being a complex, socially constructed technology in themselves. The corporations that ran the railroads are also one-dimensional at times and deserving of further analysis. Moreover while it is extensively footnoted, the only bibliography in the book is a listing of the many court cases that have been consulted. The strengths of the work offset many of the weaknesses, but some questions still go unanswered.

Jeff Schramm, University of Missouri –  
Rolla

Marina Benjamin, *Rocket Dreams: how the Space Age shaped our vision of a world beyond*, London, Chatto & Windus (2003), 302 pp., £12.99.

This Space Age has yet to find its historians. There are plenty of journalistic accounts of space flight, a good deal has been written on the science and hardware, and works on the 'military-industrial complex' and other aspects of post-war US and Soviet military development have dealt with the role of the space programmes and space technology on the two sides of the Cold War; and of course there are heroic accounts of space explorers and the achievements of visionary scientists and engineers. There is nothing as yet, however, that does for the Space Age what a legion of railway historians have done for the Railway Age, and that others are now doing, gradually, for the Motor Age. Perhaps it is all still too recent. Certainly space is an unexplored frontier for transport historians, although it surely falls within the remit of historians of movement and mobility, imagined and actual. Any transport historian wanting to look to space for a new field of research could do much worse than turn to Marina Benjamin's new book as a guide, not to what has

gone on in space during the Space Age, but to what people have thought about it and why it matters.

Marina Benjamin's book is not a scholarly history, but nor is it a shallow populist work of the journalistic school. It is a serious and thoughtful attempt to take a long view of the Space Age, from the early satellites to the troubled recent history of the Space Shuttle. It is written from a personal viewpoint. Benjamin, a child of the 1960s (as is her reviewer) grew up in a world filled with the imagery of space – and not only space itself, but the conquest of space. The reality of manned space flight filled the newspapers and the television screens of her childhood, and around them flourished an even more intoxicating world of the future promise of space: colonies in orbit, landings on Mars, space-based science that would transform the world, exploration, conquest and trade among the stars. Her book begins from wondering where all those dreams went and when the bright promise of space began to wane; and, more interestingly perhaps, why these dreams and hopes had the hold they did over people, and what they tell us about the society that nourished them.

There are various reasons why readers of the *Journal of Transport History* might look askance at this volume. It is unreferenced and has a thin bibliography. Stylistically it is not entirely free from the vices of journalism; there is sometimes a little too much verbose scene-setting, a little too hard a search for immediacy and impact, and a little too much subjectivity. Yet the merits of the book far outweigh these drawbacks (which, to be fair, reflect the kind of book it is; and it does not pretend to be anything else). At her best Benjamin is a thoughtful, insightful and well read guide to the place of space in post-war Western consciousness. She eschews technical details and hero worship, the familiar drama of rocket launches and space walks, for a lower-key but profound meditation on how space came to be seen as a new promised land for many in the post-war world, the reasons for the hopes and dreams they projected into the stars, and what the

obtruding of reality, in the form of militarisation, corruption, cutbacks and compromises meant for those heady ideals.

The sheer range of topics Benjamin covers reveals how wide and deep the influence of space has been over the past five decades: space stations and hippy colonies, planetary exploration and cyber-communities, universal surveillance and one-world consciousness, all are skilfully brought together in a synthesis that does not always hold together or convince, but is consistently analytical and thought-provoking.

Space has been seen as the final frontier because it has been perceived as limitless.

As Benjamin observes, with any frontier, exploration and conquest would mean a process of taming, with traders following in the wake of explorers, dull technicians succeeding daring swashbucklers. But space, it was believed, would always provide new realms and new frontiers: its potential and its excitement were seen to be endless. For scholars of transport history in its widest sense, Marina Benjamin's illuminating study of the ways in which the dream of space has haunted the modern imagination provides object lessons in the limits and the potentials of human mobility, both actualised and imagined.

Ralph Harrington, University of York