Book reviews

Didier van de Velde (ed.), *Changing Trains: railway reform and the role of competition: the experience of six countries*, Ashgate, Aldershot (1999), 364 pp., £47.50.

This survey of railway performance in Britain, France, Germany, Switzerland, Sweden and Japan is based on research carried out in 1997 and financed by Dutch Railways and the Dutch Ministry of Transport. The authors of the separate chapters, with the exception of the chapter on Switzerland, which is written by the book's editor, come from universities of the country whose transport policies are researched. Thus Gunnar Alexandersson and Steffan Hulten, of Stockholm School of Economics, write on Swedish railway policy. The interest of the book lies in the comparison it draws between the transport policies of the different countries. The shared belief of the authors is that there is more scope for competition in the generally monopolistic management of the railways – Britain being the exception – and that the 'opening up' of the market for railway transport would lead to greater efficiency and consequent reductions in operational costs. In the last three decades in each country passenger and freight traffic has shrunk, in most cases, to less than 10 per cent of all transport. The assumption is that the adoption of the reforms in railway policy and administration examined in this book would attract more custom back to the rails.

All the authors are concerned with the heavy burden of debt of government-run railway systems and they advocate a cancellation of a major part of these historic debts as a precondition for the revival of railway transport. This policy was carried out most decisively in the cases of Sweden, Japan and Switzerland.

It was often the need to retain adequate bus and train services in rural areas for social reasons that contributed to the growth of railway and bus company indebtedness. In Sweden, before the passing of the County Public Transport Authorities Act in 1979 gave the country's twenty-four counties some responsibility for the maintenance of local transport services, there was a tendency for Swedish Railways to run down or close unprofitable railway and bus services. Alexandersson and Helton claim that in the last two decades of the twentieth century there was an upsurge of county patriotism which led to more local finance being made available for integrated transport services, i.e bus services timed to train arrivals and departures. They claim that more lines were kept open and more passenger traffic was generated than would have been the case without the reforms

In 1991 EU directive 91/400 required the separation of national railway infrastructures from the provision of railway services. It also mandated the introduction of competitive tendering for the construction and maintenance of railway track and the provision of passenger services. This directive was followed very patchily in the six countries. In France, where SNCF owned both track and railway services, the separation was made only in the accounts. The railway company stressed that its 'oneness' as a publicly owned industry would be retained. Certainly in 1997 it established the Réseau Ferre de France (RFF) which was described as 'a publicly owned industrial public establishment' and was responsible for the rail infrastructure. But it is financed by and is controlled by SNCF, which asserted that 'the essential vision of a public service' would be upheld.

The European Union emphasised the need for the financial stability of the member states and Japan. This prompted the drive to cut labour costs in each railway system. The policy was given greatest emphasis in Japan, where railway labour employed fell by 70,000 in the

one year 1965–67 following the excessive recruitment in the Shinkansen boom years of high-speed train promotions. In Britain the labour force was reduced by over a quarter between 1990 and 1995. In the case of South West Trains and Regional Railways North East it was soon seen that the cost cutting was carried out recklessly, with shortages of engine drivers and signal operators leading to cancellation of some services. In Japan there was a thoroughgoing reform of the industry's structure, with JNR being split into six large regional JRs and one JR, incidentally, retained in public ownership as a national freight organisation.

It is apparent that in the cases of Germany and Sweden the political influence of the more left-wing parties prevented the modernisers having a clear run in the extension of privatisation. Carsten Lehman, in his forty-page chapter on Germany, notes that it is in Deutsche Bahn's interest to keep control of the track, as 'the general argument for more transparent conditions for competition will not be listened to'. The Swedish parliament in May 1994 approved a far-reaching plan for the deregulation of SJ, the national railway, as from 1 January 1995; but it was put in cold storage when the Social Democratic Party regained power in the election of September 1984.

In formulating its policy the Swiss federal government has to bear in mind the desire of the cantons for more say in local transport policies, and the need to encourage the Swiss Bundesbahn to do more to attract tourist traffic. The Federal Railway Law on Passenger Transport of March 1998 gave the management of SBB more freedom to operate in the market, and gave the cantons the right to initiate new bus and rail services, subject to the approval of the federal authority. But it emphasised the value of 'clock face' timetabling. The policy of introducing more free competition was rejected because of 'capacity problems', i.e. avoiding waste of space on stations. SBB has been criticised for excessive caution in 'liberalising' its commercial policies; but in 1995 public services by rail and bus took 18 per cent of the total passenger movements – a larger share than was achieved by the five other countries.

Van de Velde, in his introduction, warns that the articles on the separate countries' railways were not intended 'to result in policy advice', rather they were meant to stimulate discussion. This reviewer suggests that studying railways in isolation, largely for their financial soundness, without considering the impact of road transport, has serious limitations. The damage to the economy and society through railway indebtedness may be less than that caused by the incidental costs of road transport, i.e. pollution, congestion, the cost of accidents, etc.

Philip Bagwell, London

Pere Pascual Domenech, *Los caminos de la era industrial: la construcción y financiación de los ferrocarriles en Cataluña, 1843–1898*, Fundación de los Ferrocariles Españoles/Gestor de Infraestructura Ferroviaria/Edicions de la Universidad de Barcelona, Barcelona, 1999, 510 pp.

The year 1998 marked the hundred and fiftieth anniversary of the first railway system in the Iberian peninsula. The Fundación de los Ferrocariles Españoles commemorated the event with a set of publications which included a book on railways in Spain and this volume, dealing with railways in Catalonia before 1898. In that year the last railway to be built in Catalan territory, mainly with Catalan capital, was taken over by one of the largest of the Spanish companies, mainly French-owned. The take-over meant the end of expansion for the Catalan system, which had been built up by local effort and investment within a framework of development conceived in 1830, when the cotton textile industry was beginning to take off using modern techniques.

Pere Pascual's book concentrates on detailed analysis of each of the lines planned and built in nineteenth-century Catalonia. It begins with the very first, Barcelona to Mataró, on the coast, and ends with the merger between the MZA and the Tarragona–Barcelona–France

company, finalised in 1898. The opening chapter familiarises the reader with the historiography of the role of railways in the evolution of the Spanish economy. The author discusses the most relevant material published in the 1980s and 1990s, and explains traditional forms of transport in pre-railway days. A detailed account is given of the economy's need for a transport infrastructure in the first half of the nineteenth century. The various stages in the construction of the network are outlined. The initial phase between 1843 and the mid-1860s demonstrated the enthusiasm of Catalan finance for building lines to Aragon. Another motive was to link Barcelona with the economic areas served by its port. The aim was to lower mill workers' cost of living by linking the textile districts with the cereal-growing areas of Aragon and Castille, and to find the coal supposedly hidden in the foothills of the Pyrenees which would make Catalan industry independent of British supplies. The end of the British monopoly would be particularly important to the textile industry and the embryonic metallurgical sector.

The economic crisis of the mid-1860s slowed and finally halted the boom in construction which until then had held the interest of investors and Catalonia's bondholders. Most of the railway companies served only a small area and had little prospect of increasing their freight or passenger traffic. Their financial instability made them vulnerable to any recession in the national economy. The slow-down of the 1870s was followed by a resurgence which lasted until 1894. Broad-gauge lines were built, weathering the difficulties of the mid-1880s stock market crisis or 'gold fever'. The MZA take-over of the Tarragona–Barcelona–France company in 1898 left the network of small interconnected lines in the hands of the two largest, mainly French-owned, companies, the Norte and MZA itself.

The core of Pere Pascual's book describes and analyses the routes, the concession and construction processes, the operating problems, the financial setbacks, the shareholders and their motives, and the mergers. His contribution to our understanding of how capital was raised during the second half of the nineteenth century, of the way firms worked as transport companies and of their relation to the socio-economic environment, is one of the most interesting aspects of the book. The conclusion tentatively explores the way the national network operated in the later nineteenth century, although it is somewhat deficient as regards pricing policy and the functioning of agreements. There is also a detailed account of the 1898 MZA take-over of the Tarragona–Barcelona–France company, masterminded by Rothschild's. In the final section Pascual reveals new information about the negotiations between the companies' executives and the role played by the bondholders. It demonstrates conclusively the relevance of modern agency theory to mergers and acquisitions.

The book is the fruit of years of research and its publication is due to the efforts of public institutions whose aim is to encourage the use of railways as a means of transport. Unfortunately it includes neither a bibliography nor an index. There appears to be no reference to the relation between the railways and their stimulus to local railway industry, that is, to the possible effects of backward linkages, which were of great importance in Catalonia. Nonetheless the book is an important contribution to the history of railways in Europe, especially as regards the differences from the Spanish experience. Railway development in Catalonia seems to have been more akin to the French or English model as regards local involvement, not only in terms of investment but in terms of concessions and incentives.

Javier Vidal Olivares,
Universidad de Alicante

Miguel Muñoz Rubio, Jesús Sanz Fernández and Javier Vidal Olivares (eds), *Siglo y medio del ferrocarril en España 1848–1998: economía, industria y sociedad*, Fundación de los Ferrocarrilles Españoles, Madrid (1999), 1,220 pp.

This bulky book includes chapters on

several different themes: from the international context to a general survey of Spanish railways over 150 years, from regional experience to financing and technological development, from their impact on the local economy to their influence in the arts, from the present position to future developments.

The development of the Spanish railway network offers analogies with other European countries, which are pointed out in the first chapter, where Albert Carreras charts some historical perspectives, while the British story is outlined by Terry Gourvish, the French by Michèle Merger and the Italian by Andrea Giuntini. The international comparison continues with a chapter by Glenn Porter on the United States and an analysis of railway building in Brazil, Argentina and Cuba. In Cuba, one of the last colonies of the empire, the railway was a reality ten years earlier than in the metropolitan country. Indeed, the colonial government quickly recognised the importance of railways to an economy based on exports. The Cuban experience had considerable influence on Iberian railway projects.

At the beginning of the nineteenth century Spain had one of the worst inland transport networks in Europe. The mountainous topography and the lack of navigable waterways were an almost insuperable obstacle to the movement of passengers and freight. The political and social consequence was a historical tendency to fragmentation. By linking the various provinces and creating a national market the railways played a vital role in the industrialisation and modernisation of society, as the second chapter explains.

The building of the first railway, 28 km from Barcelona to Mataro, began in 1843 – very late in comparison with other European countries. The line was opened in 1848. The network expanded rapidly in the 1860s, reaching 5,200 km of track in 1868, by which time all the principal towns were connected. In the north the Madrid–Valladolid–Venta de Baños line was completed, as was Madrid–Saragoza–Barcelona in the north-east and Madrid–Alcanzar de San Juan in the south. During the following decades the railway network had a clear influence on urbanisation and the location of factories and plant.

During the building of the network political and technical problems emerged, thanks to government shortsightedness. Characteristic was the decree of 1844 which prompted speculation in railway shares and led to the adoption of a different track gauge from the European standard. Further legislation in 1855–56 tried to remedy the situation but was unable to resolve the gauge problem. Jésus Moreno Fernandez deals with the gauge decision and attributes it not to military considerations but to a spread of reasons ranging from engineering miscalculations to the inertia of politicians.

As Francisco Comin points out, railway construction absorbed a huge amount of capital, holding back investment in other sectors, to such an extent that the railway boom of 1855-64 was followed by a depression. The relationship between the disposition of routes, the geography of the country and the regional economies is particularly interesting, as chapters 3 and 5 explain. For example, in Andalusia a rectangular network was adopted which proved very useful in a province that was beginning to specialise in oil exports and reduce its dependence on cereals.

The Spanish companies were not profitable because they operated in a backward country and constantly needed State financial aid. They had important economic effects but were not themselves good business. As in other 'latecomer' countries the arrival of the railway preceded industrialisation and the formation of a broad internal market. Traffic was thin at first and remained so for a long time. The railways lived precariously, with rates high on the grounds that demand was inelastic. The First World War was to change even that, thanks to competition from motor transport. Between the wars the railways were in constant crisis and in 1941 Franco's government was compelled to nationalise them, creating the State enterprise RENFE.

Chapter 6 ranges from railway museums and the preservation of company records to the railways in literature, art, cinema and music. The last chapter looks at the future, and there is a brief account of tramways, so important in the first half of the twentieth century and now returning to improve the accessibility of Spain's largest urban centres.

Stefano Maggi, University of Siena

Serge Paquier, *Histoire de l'électricité en Suisse: la dynamique d'un petit pays européen 1875–1939*, Editions Passé Présent, Geneva (1998), two volumes, 1,214 pp.

As Serge Paquier shows in this thesis dedicated to the history of electricity in a small country, two different implications for transport can be discerned. First, tunnelling into the Alps in the second half of the nineteenth century tested new methods of distributing power over long distances. Even if they were not directly connected with the electricity system, the boring of the Mont Cenis tunnel (1845–71), where Swiss technology was used, and particularly of the Saint-Gotthard (1873–83) were crucial events, for they demonstrated the huge capacity of hydraulic resources to generate electricity. Second, they illustrated the importance among the Swiss engineering fraternity of learning by doing in accumulating technological know-how, especially for the Genevan engineers Colladon and Favre. In this way the use of air compressors reached its limit and the developers of the first Swiss urban power stations in the 1880s were able, later on, to reject the use of compressed air for tunnelling.

Swiss railways played an important role in the development of electric traction. Paquier rightly insists on the fact, and this chapter is one of the best in the book. He argues that Switzerland became one of the leading countries and a centre of expertise in this technology. By 1939 no less than 73·6 per cent of the rail network was electrified, one of the highest proportions in Europe or indeed the world. Several factors worked in favour of electrification, not least political ones. The nationalisation of the railways in 1898 helped because it created the right conditions for an integrated network to emerge. Drawing on previous experience and on the know-how accumulated in tunnelling, the government was keen for its network to be completely independent and as efficient as possible. This aim was supported in political and social circles because it reinforced the sense of nationhood at a time when foreign 'affairs' were unsettling the country. In this respect the Great War was the decisive factor.

The only point at issue was the choice of system. The battle between supporters of single-phase traction current and those for direct current was heated. The experts on the managing committee of the Federal Railways were ranged against private-sector firms like Brown Boveri, eager to sell their power equipment. The choice of single-phase current guaranteed Swiss Federal Railways a greater degree of independence not only in the way they used the current but also in power generation.

Paquier gives a clear account of this core debate in the country's economic and political history. Dealing with all the reasons for the emergence of an electrical industry in Switzerland, he assigns transport an important role. He thus helps us understand the importance of the interaction between the different components of this new economic sector.

Laurent Tissot, University of Neuchâtel

Stanley Hall, *Broad Survey*, vol. I of *The History of Railway Signalling in the British Isles*, Friends of the National Railway Museum, York (2000), 230 pp., £30·00.

It is now over ten years since a group of supporters of the National Railway Museum went out on to the open-air stacking ground to face a large and confusing miscellany of signalling equipment in varying states of repair. More, we were told, was arriving every week, because word had got round BR that the museum would welcome this kind of

thing. It was a formidable problem: what to keep, and how. There were few clues in all that had been written about British railway history to help the curators determine what among all this equipment had been really significant and what had been leading up a blind alley. It was decided that a comprehensive study of the subject should be undertaken. The upshot is here, in the first volume of what promises to be an important series. The authors who undertake succeeding volumes will do well to follow the lead set by Stanley Hall. The economy of his words does not hide his feeling for the place of signalling in the world of railways.

The arrangement, in thirty-four short chapters, is at once chronological and thematic. There is a brief survey of signalling on 'mass transit systems'. The equipment available at different dates is described, with special attention to the related fields of the telegraph, the railway inspectorate, signalling contractors and train brakes. These developments are clearly set out, and they provide a very useful background to any discussion of railway safety. Hall's comments are not too frequent or shrill; they show him to have a down-to-earth understanding of the economic background at different dates and of management's problems and those of the staff who have to work and maintain increasingly complicated equipment. He turns frequently, and with a measure of understanding, to the slow pace of investment.

Along the way he illuminates the nature of life on the railways; his world exists outside the signal box too. Particularly illuminating are his comments on the antique practice, obsolete long before it was given up, of running freight trains all over the system, largely without continuous brakes, and the operators' fondness for shunting a few wagons off and on the running lines here and there, so holding up progress. However, he might have excluded the Southern Railway from his comment in this regard. The first main-line application of yellow to distant signals was, as he writes, on the Great Central in 1917; it is left to the chapter on mass transit to record that the first in Britain was on the Metropolitan District – in 1907, though the date is not given.

The book is a large (27 cm × 21 cm) if slender volume. The black-and-white illustrations are clearly reproduced. The references and index are full and appropriate; there is a useful glossary and a list of illustrations; the line diagrams are clear. Some of the subjects (including the Institute of Railway Signal Engineers) are treated in separate panels outside the main text, which is not wholly satisfactory. But this is only a niggling point, in comparison with the broad scope and good sense of the whole book. Readers must look forward to the forthcoming volumes.

Michael Robbins

Stefano Maggi and Federico Paolini (eds), *Il sindacato in ferrovia: dal fascismo alle federazioni dei trasporti*, 1922–1980, Marsilio, Venice (2000), 348 pp.

The Italian transport network is going through a critical period. Among EU members, Italy almost heads the list of countries where reorganisation is urgent and there is a need to enhance railway services to relieve road congestion. Moreover the trend of European integration and the growing concern across the continent about environmental pollution both point to greater use of rail. Partly as a result, Italian historians are turning their attention to the national transport system and the reasons for the late development of public transport in comparison with other European countries.

Little of such work has touched on the role of transport *workers*, so this book is particularly welcome. It is a major piece of research, using oral and written sources, supported by the Società nazionale di mutuo soccorso Cesare Pozzo, at present the only Italian institution supporting historical scholarship on railways and railwaymen. Cesare Pozzo was himself a pioneer of trade unionism on the railways at the end of the nineteenth century, his biography having been published by Stefano Maggi in

1998. This book is a continuation of the story begun with *Il sindacato ferrovieri italiani dalle origini al fascismo 1907–1925*, published by the same institution in 1994. Together the two books cover the whole of the twentieth century and describe the history of one of the most militant categories of trade unionism – and democracy – in Italy. It is a history almost wholly neglected in the historiography, focusing as it does on workers in heavy industry – surprisingly, given that since the last decade of the nineteenth century it is the railwaymen who have been the spearhead of the trade union movement. As Maggi and Paolini point out in their introduction, although the railwaymen were always one of the most politicised groups of organised labour, their trade unionism was for long based on a policy of proud independence from the parties and was representative of the particularity of railway work. At the same time the railwaymen always considered themselves part of the trade union movement.

This volume also explains some of the more controversial issues in their recent history, such as their decreasing political influence in the second half of the twentieth century. This was due to the railways' declining importance in transport policy after 1960, when a choice was made in favour of cars and *autostradi* over rail transport. Another theme the book deals with is the growth of independent trade unionism as a reaction to the syndicalist policy of official unionism after the Second World War. The independent union movement sought wage uniformity in the 1970s and a separate organisation for engine drivers, the latter cause leading to a succession of strikes which lasted intermittently until recent years.

The time scale of the book, from 1922 to 1980, is divided between Giovanni Valentinuzzi, Massimo Taborri, Mario Fratesi, Stefano Maggi and Federico Paolini, according to the periodisation of Italian history. The essays are dense with data and draw on a huge range of sources, combining information with accurate historical interpretation and conveying the technical aspects. The book is an important sign that the study of Italian trade unionism has come of age; in particular, ideological interpretion, which has so long characterised studies in Italian labour history, has at last given way – in several of the essays – to historical research into the real problems of railway labour and their links with economic and administrative history.

Andrea Giuntini, University of Florence and Modena

Eiichi Aoki, Mitsuhido Imashiro, Shinichi Kato and Yasuo Wakuda, *A History of Japanese Railways, 1872–1999*, East Japan Railway Culture Foundation (2000), 256 pp., £55·00.

This is an exceedingly well produced account of the chequered but impressive growth of Japanese railways. All four authors are key members of the Railway History Society of Japan. One of their number, Mitsuhido Imashiro, was joint author of *The Privatisation of Japanese National Railways*, reviewed in March 2000. The book is lavishly illustrated, with ten pages in colour. Included in the main text are thirty-eight 'thumbnail' sketches of the leading personalities (all men) who played a part in the progress of the system. Many maps help the reader to see where the network was densest and to follow the growth of the Shinkansen (high-speed) lines; forty-two appendices include statistical tables and diagrams showing the evolution of technical features of locomotives, wagons and carriages. It is the first complete history of Japanese railways written in English.

The authors distinguish four main periods: (1) from the opening of the first line from Tokyo to Yokohama in 1872 to the end of the Russo-Japanese war in 1906, (2) from nationalisation in 1906–07 to the end of World War II, (3) from General MacArthur's order to the Japanese Prime Minister of July 1948 and the subsequent creation of the Japanese National Railways to 1987, (4) privatisation from 1987 to 1999.

In the formative period after 1872 the Japanese government hired 300 foreign

nationals (most of them British) as civil engineers, general managers, locomotive builders and drivers. Among them were Henry and Richard Francis Trevithick, grandsons of the English locomotive pioneer. Some of the early lines were privately built and run, others were government-owned and run. The Railway Construction Act of 1892 was a compromise. It stipulated government ownership but railways serving a local community could remain in private hands. It was up to local industrialists, with the aid of their banks, to promote and run such lines. From 1903 to 1905 the silk producers in the hills north-west of Tokyo waged a successful campaign for the railway to be extended to their district. Once the line was open the production of raw silk increased dramatically. Developments such as these gave Japan a mixed railway economy through the period covered by the book, with government railways running the trunk lines and privately owned companies acting as feeders.

In the Sino-Japanese war of 1894–95 and the Russo-Japanese war of 1905–06 the government-owned railways on the routes to the ports were very busy, but not too busy to frame a railway nationalisation policy with three main aims: to simplify train services by unifying ownership of the track, to cut freight rates and fares, and to standardise railway material and economise on operational assets. The proposals were embodied in the Railway Nationalisation Act of 1906. Within the next two years the seventeen most important private companies were bought by the Railway Agency (later the Ministry of Railways) at an exceptionally high price. However, many of the smaller concerns, mainly serving the rural areas, remained under private control. This division of labour remained for eighty years until full privatisation in 1987.

Not long after the end of World War II General Douglas MacArthur, Supreme Allied Commander, instructed the Prime Minister, Hitoshi Ahida, to prohibit all strikes by public servants, reject collective bargaining and reorganise the railways and all major government enterprises into public corporations. On 1 June 1949 the Japanese National Railways took the place of the Railway Board of the Ministry of Transport. The JNR was not a truly independent body, since it had no power to control fares or its staff's wages, but it was a beneficiary of the years of prosperity when the demand for passenger and freight transport was at its peak.

On balance the publicly owned part of the railway industry had a good record of engineering innovation. As early as 1919 it decided to replace screw couplings on its 41,661 freight wagons with American-type automatic couplers which were safer, especially on narrow-gauge lines. For operational reasons the change had to be effected at night. On Honshu, the largest of the four islands, the work was done in one night, on 17 July 1925, all wagons having by then been allocated the new equipment. The authors claim it as 'a notable event in world rail history'.

Outside Japan the best-known event in the country's railway history is the opening of the Shinkansen line on 1 October 1964, covering the 515 km between Tokyo and Osaka at 210 km hr in just over three hours. The Shinkansen was a forerunner of high-speed railways throughout the world. Influential in its success were Shinji Sago, the president of JNR, and Hideo Shima, vice-president of engineering. They insisted, against much opposition from conservative railwaymen, that what the inter-city link needed was new standard-gauge dedicated track. Advanced safety systems, including cab signalling and automatic train control, were installed. The success of the Tokyo–Osaka Shinkansen line led to pressure in the Diet for rapid extension and tunnels through natural obstacles. It took sixteen years to build the 53·85 km tunnel linking Hokkaido with Honshu. By comparison the Channel tunnel, the second longest in the world, is 49 km in length.

By the late 1970s the JNR was heavily in debt as a result of pressure groups in the Diet demanding the expansion of services beyond its resources and the government's diversion in 1937–45 of surpluses from the railway account to finance wars in eastern Asia. Competition from motor traffic and coastal shipping did much to reduce rail's share of

the freight market, which fell to 13·1 per cent as early as 1975.

Under a series of laws passed in 1986 JNR was split between seven new railway operators, six for passengers and one for freight. In the first two years of operation good profits were earned by the 'JRs' in Honshu and very small profits by JR Freight and the JRs of the smaller islands. By the later 1990s JR West (Honshu), JR Freight and the three smaller islands' JRs were declaring losses. They were given grants from a Railway Development Fund set up in 1991.

As the authors have produced such a splendid book it seems peevish to point out deficiencies. But their failure to consider environmental issues must be reckoned a serious omission. There has been a commendable trend to the production of smaller cars in Japan but appendix 6 refers to 48 million motor vehicles on the roads. We do not know what proportion are heavy goods vehicles. The surface area of Japan is some 37 per cent greater than that of Britain yet motor vehicle numbers are twice as high. We should like to know how the JRs of modern Japan propose to attract people on to public transport.

Philip Bagwell

Margaret Walsh, *Making Connections: the long-distance bus industry in the United States,* Ashgate, Aldershot (2000), 281 pp., £42·50.

This collection brings together Margaret Walsh's extensive research into the economic, business and social history of the US bus industry between 1920 and the 1970s. Nine articles are reprinted from journals and books; in addition there is a new introductory survey of the subject plus a bibliographical essay and an impressively detailed bibliography. The research project was originally intended to centre on the Greyhound Corporation, the leading business and a cultural image of note in its own right, but the firm's archives were beyond reach – a matter of regret, since it cost Greyhound the insights of a meticulous historian.

The central theme of the book is the transitional period between 1930 and 1960 during which the long-distance bus industry lost market share to the private automobile and, more gradually, to the civil aviation industry. Walsh highlights the industry's marketing emphasis on low cost, comfort and reliability as its main tactic to attract business. Yet, other than in the 1930s and 1940s, such features drew primarily low-income customers or 'niche' markets, such as specialist tours. A wartime legacy of old buses and memories of crowded wartime journeys hindered the efforts to capture business in the immediate post-war years.

By the mid-1950s the availability of automobiles and the expanding system of interstate highways were stimulating car travel more than long-distance bus journeys. Within this framework, Walsh analyses the origins of the bus industry, the strategies and entrepreneurs involved in the creation of regional and national 'systems', and the interactions with state and local regulators. The regional dimension provides interesting insights into the operation of business strategies, especially in Minnesota and Iowa, based on impressively detailed research among diverse sources. In the final part of the book the methodology shifts away from standard business history and towards the perspectives of gender history and cultural studies. Among the themes are the roles of women as consumers, entrepreneurs and executives, interpretations of advertisements for bus travel, and an appraisal of Esther Bubley's photographs of bus travel in the 1940s. In each of these respects the study makes an effective contribution to the recent trends towards a different style and context of business history. Although elements are familiar from the original articles, the collection makes valuable material accessible and succeeds in connecting many disciplines in an illuminating way.

Michael French, University of Glasgow

W. David Lewis (ed.), *Airline Executives and Federal Regulation: case studies in*

American enterprise from the airmail era to the dawn of the jet age, Ohio State University Press, Columbus OH (2000), 379 pp., $60.00.

This book argues that the airline industry's development was determined by the individual characters of airline executives and their relationship with federal authorities, most obviously the Civil Aeronautics Board. Politics was pivotal, even for executives who ostensibly cared little for it. 'Entrepreneurs may distrust government,' suggests Lewis, 'but they will court its intervention if it suits their purposes to do so' (p. 38). This still bears relevance today, and the work is a timely contribution to a deregulation debate which is still going on in the airline (and other) transport industries.

There is a cross-section of essays on individual executives, ranging from those who worked happily with the CAB to those who were more hostile. They involve a mix of scale, from major airlines to regional operations and non-scheduled carriers. The list of contributors is impressive and includes William Leary, Roger Bilstein, George Hopkins and Lewis himself, all of whom are familiar to aviation historians. Additionally, each chapter closes with a useful bibliographical essay.

As Lewis argues, the CAB was one of the most powerful regulatory agencies in American history and its presence frames each of the chapters. William Trimble's discussion of George Hann examines the immediate pre-CAB period, focusing on the 1930 'spoils conference' at which Postmaster General Walter Folger Brown attempted to strengthen the position of established carriers, and thereby the industry itself. The 'conference' became a subsequent target of Franklin D. Roosevelt's Democratic administration in a series of moves that broke the relation between airlines and the US Post Office and led to the creation of the CAB in 1938. Hann, a major player in the formation of Transcontinental and Western Air (later TWA), harboured a sense of injustice against the early New Deal until the 1960s.

Roger Bilstein's analysis of C. R. Smith and American Airlines stresses the carrier's technologically pioneering role and especially in its introduction of the path-breaking Douglas DC-3. This aircraft reduced airline reliance on mail subsidies and enabled companies to survive purely through flying passengers. Before the creation of the CAB, this made established airlines vulnerable to new start-up carriers and thus the institution of the federally led structure, which the CAB represented, essentially protected carriers like American Airlines. American courted Washington assiduously, establishing a permanent office there in 1942. Its relations with government were not always harmonious, however, particularly during the (abortive) merger talks with Eastern Airlines in the 1960s and the hearings on the southern transcontinental air route. There is also an interesting discussion of American's first, unsuccessful, foray into the overseas market.

Perhaps the closest association between airlines and federal bodies is provided by the example of Donald Nyrop and Northwest Airlines. Donna Corbett discusses Nyrop's move to the carrier after being CAB chairman, but claims he could 'never truly leave Washington behind' (p. 125). While at the CAB Nyrop shared President Truman's safety concerns, an attitude he took with him to Northwest and which became one of that carrier's hallmarks. Part of this concern was directed at what Nyrop thought were the inefficiencies arising from federal subsidies. He thought that airlines should be self-sufficient, though some of his attempts to reduce costs at Northwest led him into conflict with labour unions.

Michael Gorn paints an intriguing picture of Continental Airlines' Robert Six, who tested and prodded the CAB in various ways. Six introduced interchange agreements and used astute mergers to expand Continental's network. He advanced the carrier's image from its origins as an aviation upstart – 'a small aggressive firm', as he bragged, 'not held back by tradition' (p. 190). However, Six was also a shrewd political operator,

earning the respect of the CAB and the ear of President Lyndon Johnson, as well as cleverly courting media attention. In many ways Continental presents the perfect case study of deregulation (including its later period under the corporate raider Frank Lorenzo), and Gorn's fascinating section includes Six's testimony to Congress preceding deregulation in 1978.

George Hopkins's chapter on George Baker and National Airlines, and Lewis's own contribution on Eddie Rickenbacker and Eastern Airlines, focus on rivals in the same corner of the United States. They also arrive at the same implicit conclusion: that Rickenbacker's constant criticism of the CAB won Eastern no favours and merely strengthened National's position. The CAB favoured National purely because it was not run by Rickenbacker. According to Lewis, Rickenbacker, a legendary air ace and arch-conservative, was out of step with an industry increasingly predicated on the provision of service to the customer, and there is a nicely anachronistic depiction of him personally upbraiding passengers on an Eastern flight for being rude to the cabin crew! Politically he hated the Democrats (and therefore the CAB) and in the 1960s supported Barry Goldwater. On the other hand, as Hopkins points out, National's Baker was also 'no liberal Democrat'. Indeed, he was probably just as extreme in his political conservatism as Rickenbacker, but he was 'craftier' (p. 222) in his dealings with Washington. Whereas Rickenbacker made no attempt to win friends in high places, Baker worked the political circuits and took National Airlines up the rankings with him.

William Leary's study of Robert Peach and Mohawk Airlines provides a cameo of a small feeder airline growing into a regional carrier before overextending itself and finally being swallowed up by Allegheny in 1971. Peach committed suicide shortly afterwards. The role of local airlines was crucial, yet controversial, in the expansion of the US air network, and Peach's battle with Washington in the 1950s paved the way for the permanent certification of such carriers. Mohawk's golden years were in the 1960s, when the CAB approved Peach's purchase of British BAC 1-11 short-haul jets. Ironically it was their cost which led to Mohawk's decline.

In the final chapter Roger Launius explores Transocean Airlines and Orvis Nelson. Launius recounts the conventional thesis that non-scheduled carriers were excluded by a CAB increasingly acting in collusion with the big airlines. Concern about safety was supposedly exaggerated to undermine the position of the 'non-scheds'. That Nelson was a Republican hardly helped his cause during a mainly Democratic period, although even President Eisenhower refused to back TAL in its pursuit of regular schedules. Launius paints an interesting story concerning TAL's foreign policy role, supporting the American military in Korea and at the time of the Berlin Airlift. Ultimately, he concludes, 'supplemental' carriers, as the 'non-scheds' were known in the United States, were undone more by the economics of the industry than by any conspiracy on the part of scheduled carriers or the CAB.

Drew Whitelegg, Anglia
Polytechnic University

Nick le Neve Walmsley, *R101: a pictorial history*, Sutton Publishing, Stroud (2000), 142 pp., £14.99.

Brian Trubshaw, *Concorde: the inside story*, Sutton Publishing, Stroud (2000), 176 pp, £19.99.

In October 1930 the British airship R101 came down in a wood near Beauvais and in the conflagration which followed forty-eight of the crew and passengers perished, including the Air Minister. In July 2000 an Air France Concorde crashed into a Paris suburb with the loss of over a hundred lives. At first glance these two disasters may seem unrelated; an airship chugging through the sky at a ponderous 60 m.p.h. does not have a great deal in common with an airliner flying at a supersonic 1,350 m.p.h. But to Britons in the late 1920s the R101 was as

much a technological marvel as was the Concorde forty years later. Moreover both the Concorde and the R101 are emblematic of rich men's travel in the twentieth century and they can be seen as diversions – one might even call them false trails – from the main path of air transport development. The Concorde originated as an expression of Anglo-French 'techno-nationalism' and ended up carrying the rich and famous across the Atlantic. The R101 was conceived in the days of empire as a means of conveying government officials more expeditiously to the colonies. These two illustrated volumes allow us another look at them.

Britain's airship programme began after the First World War on the initiative of the Conservative Air Minister, Sir Samuel Hoare. In 1924 the programme was taken up with enthusiasm by the Labour Minister, Lord Thomson, who, like Hoare, saw airships as the way to modernise communications with India. Thomson launched the construction of the State-funded R101. It was dubbed the 'socialist' airship by the popular press, although it is hard to see what was 'socialist' about a transport mode that offered its passengers all the comforts of a luxury liner: ballroom dancing, a promenade deck and separate cabins in which to change for dinner. Nick le Neve Walmsley's book is a pictorial history with minimal interference from the written word, but some of the 162 black-and-white illustrations that he has collected are fascinating to the historian, and he is to be commended on his wide-ranging trawl through the archives. The most interesting to this reviewer are photographs taken during the R101's construction stage. In one picture, presumably from 1927, four craftsmen are shown working on the airship's Duralumin girders at Boulton & Paul's Norwich works, one pair with an ancient hand drill, the others with a power tool. Apparently the R101 incorporated numerous design improvements over the standard German (Zeppelin) technology of the time; unfortunately Walmsley does not really tell us what they were. Looking at the pictures, one gets a curious impression of high technology combined with primitive improvisation, of something slightly Heath Robinson about the whole endeavour. On one page the airship is shown attached at its nose to the purpose-built docking mast at Cardington but stabilised along its length with cables attached on the ground to cricket-pitch rollers! Elsewhere teams of ladies are shown performing the revolting task of cleaning the intestines of over 100,000 oxen to provide the linings for the R101's gas bags.

In the absence of a modern 'black box' it was impossible to establish fully the cause of the 1930 crash. Apart from bad weather at the time, it seems that the main culprit was a tear in the airship's doped fabric covering. A more underlying question concerns the use of the inflammable hydrogen gas which turned a fairly gentle crash landing into a towering inferno. Why did the United States not make some of its supplies of helium available? This question is easily answered in connection with Nazi Germany and the 1937 Hindenburg disaster, but it might equally be applied to the R101. Considering the enormous effort in manpower and resources that went into it (mooring masts had been constructed at vast expense at Ismailia and Karachi), the British airship programme was abandoned with extraordinary haste after 1930, with the R101's 'capitalist' sister ship, the R100, being broken up for scrap.

Concorde has been spared this ignominious fate since the July 2000 crash. Indeed, after a quarter of a century of accident-free passenger service with Air France and British Airways there is a chance that the supersonic airliner will return to the skies in the summer of 2001. As Brian Trubshaw makes clear in his richly illustrated book, there was nothing Heath Robinson about Concorde's technology; it was state-of-the-art when the plane first flew in 1969, and every last nut and bolt was tried and tested in the next seven years before it entered service. The problem of Concorde was not the technology, which Trubshaw (as chief test pilot between 1966 and 1982) was in an excellent posi-

tion to judge, it was the economics. The supersonic airliner was small (100 seats) at a time when the trend was to big (jumbo jets), it had thirsty military engines at a time when the airlines were switching to economical bypass units, and it was dirty and noisy at a time when people were getting concerned about the environment. Above all, however, it was monumentally expensive. It was launched without a single airline customer in sight (although by 1967 it had collected seventy-four non-binding 'options' from sixteen airlines) and its development costs rose at an even steeper angle than the prototype's flight path into the stratosphere. Nonetheless, as this book succeeds in showing us, it was (and is) a magnificent artefact, and at least its backers ended up with sixteen aircraft; according to the author, 'the USA spent more money [on its SST] than was ever spent on Concorde – and finished up with nothing'.

Trubshaw's explanation of basic aerodynamics and the nature of the 'sound barrier' is helpful, and he shows the importance of critical predecessors such as the delta-wing Fairey FD2 and the French Mirage jets to the Concorde's shape and wing design. On occasion the alternation of impenetrable technical expositions with whimsical tales of colleagues and VIPs may get a little trying, and there are a lot of pictures whose only significance appears to be that Mr Trubshaw is in them. Yet he also makes some telling remarks which give the book its value to historians, especially on the organisation of the Concorde programme and the Anglo-French relationship which lay at its heart. Despite the enormous cost, the British do not seem to have got the same value out of Concorde as the French. When the airfield and testing infrastructure at Fairford were closed in 1977 the Concorde team was disbanded, whereas in France the Toulouse facility, which was created for Concorde, 'blossomed' into the world-class base for the Airbus series. The French, who were far behind the British in aerospace in the 1950s, but were determined to have a dynamic industry, saw Concorde as a means to develop their aircraft manufacturing capacity and bring it up to world (i.e. American) standards. And they succeeded. By contrast, the British saw Concorde as a single project, a doubtful one at that, and joined the French for essentially political reasons. Having built and tested it by the mid-1970s they withdrew from further aerospace co-operation with France and their participation in Airbus has never risen beyond the level of a very junior partner.

Like the R101 airship before it, the Concorde stands as an example of spectacular technological achievement, sprouting like an exotic plant in the field of ill conceived planning and stop–go decision making that passed for British transport policy in much of the twentieth century. These books add considerably to our visual understanding of them both.

Peter Lyth, Tel Aviv University

Keith Lovegrove, *Airline: identity, design and culture*, Laurence King, London (2000), 144 pp., £19·95 paperback.

Perhaps more so than other transport forms, the airline industry has long been associated with branding. Certainly in a heavily regulated, and then extremely competitive, business the ability to differentiate one product from another (even when, ironically, the overall product was objectively the same) was regarded as pivotal. Such industry staples as the Singapore girl and Qantas's winged kangaroo were all part of creating an image and identity that would become recognisable the world over.

Keith Lovegrove, a design consultant, has put together a useful record that charts, as he claims, the 'results of the airlines' relentless quest to vie for attention'. In four sections – fashion, food, interiors and identity – he moves from the days of 'luxury' travel (with little mention of the stomach-churning reality) to today's mass-market industry through a discussion of cabin crew uniforms, food and service, cabin design and fleet liveries.

Lovegrove is especially strong on the names behind design changes – Mary Wells and Emilio Pucci, for instance,

who pioneered uniform innovations at Braniff and Alitalia, as well as Bobby Kooka, the man behind Air India's maharajah mascot. The section on cabin crew seems to me to be the best of the four, although there is a somewhat incongruous discussion of Hugh Hefner and his 'Big Bunny' DC-9, with little analysis of how the founder of *Playboy* affected airline identities.

Some of the narrative appears rather uncritical, for example 'with the aid of a uniform, a mere look from a stewardess can still make a grown man (or woman) sit down and belt up', and the overall tone of the work suggests, perhaps, more than anything, coffee-table reading. But the illustrations alone, even if many of them are staged and obvious company photographs (even passengers in economy class seem to be having a hilarious time), make this a valuable document for those interested in airline cultures.

Drew Whitelegg, Anglia Polytechnic University

Richard Howell, *The Myth of the* Titanic, Macmillan, Basingstoke (1999), 225 pp., £25·00.

Ever since *Titanic* sank after a collision with an iceberg on 14 April 1912, resulting in the death of 1,490 of the 2,201 people aboard, the wreck of the luxury liner has galvanised the popular imagination. While countless articles, books and documentaries for radio and television have reconstructed the chain of events that led to the accident, Richard Howell's study provides a rare and welcome shift of analytical focus. Rather than asking why the ship foundered, Howell investigates how this maritime disaster acquired wider cultural and social significance in the years before World War I.

A concise delineation of the ship's construction, its features and the wreck itself opens the book and renders the topic accessible to readers who may not count among the numerous *Titanic* enthusiasts. Howell goes on to argue that the accident's cultural significance rests less in the events themselves than in the 'sophisticated social representations' (p. 37) that constitute the '*Titanic* myth'. Howell conceives of 'myths' as texts that combine 'the actual and the imaginary' by potently blending 'fact' and 'fiction' in ways that invest unsettling events with intelligible meaning (p. 45). According to this understanding, 'myths' locate confusing incidents within existing cultural frameworks. Drawing on a wide range of sources, including special editions of newspapers, monographs, postcards, pamphlets, music sheets and statues, the main part of the book analyses a range of story lines that helped contemporaries make sense of the *Titanic* disaster.

Prevalent gender notions structured many accounts. In keeping with dominant models of masculinity and femininity, reports emphasised heroic examples of 'gentlemanly' self-sacrifice when 'gallant' male passengers gave up seats in lifeboats to 'helpless' women and children. Furthermore, widespread assumptions about contemporary class society supported a host of stories about individual heroism that identified acts of outstanding bravery among prominent first-class passengers while remaining silent about the deeds of passengers travelling in steerage. Accounts also displayed nationalist bias in contrasting 'Anglo-Saxon' heroic behaviour with the cowardice supposedly characteristic of travellers from the 'Latin races'. In addition, reports assured contemporaries that an unshakable Christian faith prevailed among the doomed, who allegedly intoned the hymn 'Nearer, my God, to Thee' as the vessel disappeared. It was only in the aftermath of the disaster that the belief took hold that *Titanic* had been considered unsinkable, highlighting the stunned and universal surprise at the loss of Britain's most advanced ocean giant. Despite their varying themes, all these stories served to emphasise the accident's tragic nature and thus laid the foundation of the '*Titanic* myth'.

Howell analyses in detail the origins and content of the stories that interpreted the *Titanic* disaster. Still, his claim that a unified myth sprang up around it remains contentious. He underestimates the degree of public conflict that surrounded the event in Britain at the time.

For instance, the labour press harshly criticised the government and the White Star Line for a shortage of lifeboats that resulted in the death of a disproportionate number of steerage passengers. In part, Howell's decision to exclude daily newspapers from his source sample is responsible for this blind spot. Taking on board recent anthropological work that challenges Lévi-Strauss's structuralist approach to the study of myths, on which Howell relies strongly, could have prompted the author to move in that direction. Current anthropological as well as cultural theory no longer conceives of myths as emanations of a 'collective culture' (p. 52) and instead stresses the conflicts and contradiction at work in myth making. To readers interested in these matters the reviewer recommends Steven Biel's lucid and fascinating *Down with the old Canoe* (New York, 1996), which offers an exemplary cultural history of the *Titanic* disaster in the United States up to the present day.

Bernhard Rieger, Iowa State University

G. J. Milne, *Trade and Traders in mid-Victorian Liverpool*, Liverpool University Press, Liverpool (2000), 251 pp.

This book may in some senses be seen as a 'prequel' to Gordon Boyce's 1995 volume Information, Mediation and Institutional Development, which has changed many of our perceptions of maritime history in general and more particularly of 'how things worked'. Milne's work starts out from a very considerable database founded mainly in the Liverpool Customs bills of entry and the Liverpool shipping registers, from which he has extracted what engineering historians might liken to a core sample: small but deep. He has basically entered every voyage recorded in the months of February, June and October in the years 1855, 1863 and 1873 and traced the ships involved. His last year of sampling marginally overlaps Boyce's stamping ground, which begins in 1870. What the two works have in common is their emphasis on information as a capital asset and on networking as a crucial activity.

Some may question this method, whose tight focus brings hazards of trade fluctuations whether natural or unnatural (and 1863 was clearly a freak year for the cotton trade), port investment and plain old seasonality. (It misses the peak of a trade dear to my heart, tobacco.) But the benefits it brings are considerable. I once ended a paper with the words 'We should beware of shipowners bearing archives.' This work proves the point far more conclusively than I had done, by giving 'fifteen minutes of fame' to hundreds of people whom none of us has ever heard of because they did not come bearing archives. Taken together, these unrecorded 'nonentities' were probably worth more to the port than the ones who left records, although this incalculable ratio is one that Milne does not offer.

Analysis of the database gets us deeper than that, because it shows the evolution not just of trading patterns but of trading methods in a period of rapid change. This reveals as a side issue a particular strength of the book in that it does not assume that every reader is familiar with the implications of consignments 'to order' or of the mechanisms of credit, which are explained clearly and succinctly. While we are on the subject, the writing style is beyond reproach: formal and logical where it needs to be, almost devoid of jargon, slightly whimsical and exhibiting a dry wit where acceptable. Except in one respect: it is overburdened with the sort of artificial links between chapters which make many Ph.D. theses so tedious.

The only serious problem is that the book seems to lose its way towards the end. Having created a database which is both powerful and unique, and made good use of it, the author moves on to such fields as government contracting and the problems the 'Birkenhead lobby' across the river caused the port of Liverpool. This material, while eminently relevant, is generically different and uses sources (mainly parliamentary papers) which are already well known, if not ade-

quately explored. Still good stuff, but not at the cutting edge like the earlier parts of the book, which are based on the author's massive data-inputting efforts. In fact I think it harms the earlier parts by implying that the later material is intellectually comparable. There is a fundamental difference between using material consciously recorded for posterity and using material which has been patiently prised out of Clio's unwilling and tightly clenched fist.

It will inevitably be Milne's misfortune that further improvements in computing will swamp his chosen theme with quantities of data which he could not possibly handle with the technology available when he was working on this book. His own work has done just that to David Williams's pioneering efforts on Liverpool merchants, which were entirely unaided by electronics. But Williams's work is still much cited over thirty years later, and while one must allow for an acceleration in technique I think that Milne's work will prove equally durable.

What is perhaps even more significant is that this book shows a new way forward. Rubinstein remarks of a Liverpool shipowner named Welsford that he died in utter obscurity despite being worth over £500,000 and even after having made very substantial gifts towards the building of Liverpool Cathedral. My friend the Chaddock Professor of Economic History at the University of Liverpool cannot tell me exactly how Chaddock (who was a merchant) made his money. Using current technology, Milne's method is too labour-intensive to answer every such question, but there are grounds for hope that in the not too distant future its data capture will be greatly extended at comparatively modest expense. Then we shall really know what was happening, in a way which was not known before; in the meantime this important book points the road ahead.

Adrian Jarvis, Merseyside Maritime Museum

George Behrend, *Pullman and the Orient Expresses*, published by the author at 9 Station Road, Findochty, Buckie, Scotland AB56 4PN (2000), 455 A4 pp., £69.95 (including UK postage and surface mail worldwide; air mail extra: £11.18 USA, £12.36 Australia and New Zealand). An appendix containing comprehensive lists of Wagons-Lits and Pullman cars, and an index, are in the course of preparation.

This is essentially an individual narrative, written in the first person. George Behrend is a natural raconteur and his style is eminently readable, providing factual detail with a light touch which reflects his wide experience and deep personal interest in his subject. For seventy years he travelled Great Britain, continental Europe and farther afield experiencing the delights, inconveniences and hazards of international trains, mainly those of the organisations known as Pullman and Wagons-Lits. Two personalities run throughout the volume: the American George Mortimer Pullman and the Belgian engineer Georges Nagelmackers. They were the progenitors of this complex empire, and their influence is felt even today.

The author deals with his subject in three parts: the years from 1865 to the outbreak of the Great War, the inter-war years, and the end of the Second World War to the end of the twentieth century. The war years are regarded as 'interludes' in the main narrative. We are introduced to royalty, from Queen Victoria to Queen Elizabeth II, to politicians and businessmen, Winston Churchill and Lord Dalziel, and many others. Hercule Poirot may not be there in person, but he seems not far away. The impression one gets is that these *grands express européens* were so packed with royalty travelling incognito, maharajas with their harems, diplomats, film stars and spies that the ordinary traveller must sometimes have had difficulty in finding a seat. Indeed, it was said that when the Golden Arrow departed from Victoria Station the platform was like a page from Who's Who. The story is brought up to date by Sea Containers, which now runs the Venice Simplon-Orient-Express as a regular service, and Wagons-Lits, offering the Pullman Orient express on special charter.

Although the book is packed with information, it is never boring. Unfortunately it is only sparsely illustrated, the author's collection of photographs having been mislaid as it was in production. But a number of photographs feature interesting vehicles and are supplemented by coach diagrams, schedules and menus. Bearing in mind the price, purchase will require careful thought. Who might buy it? The librarian, of course, as it is unique in its historical and personal portrayal of these fabulous trains, and the people who patronised and ran them. The traveller – and there are still many – who travel for travel's sake, and especially those who are acquainted with the routes described. The student of international affairs, perhaps, and the railway buff, for the insight into ways and means now forgotten but which influenced the style of travel today, who will study the names and numbers of the coaches.

Geoffrey Hughes

Alisdair Turnbull, *The Twilight Years of the Glasgow Tram*, Adam Gordon, Priory Cottage, Chetwode, Buckingham MK18 4LB (1998), 144 pp., £25·00.

William L. Tollan, *The Wearing of the Green: reminiscences of the Glasgow trams*, Adam Gordon, Priory Cottage, Chetwode, Buckingham MK18 4LB (2000), 96 pp., £14·00.

Both books are based largely on photographs by the late Douglas McMillan and are avowedly for the nostalgia market, but the way the illustrations are used differs considerably between the two. *The Twilight Years* has virtually no text other than brief captions giving a minimum of topographical information. The quality of the pictures is variable and some might better have been omitted. They succeed, nevertheless, in conveying an impression of the environment in which trams operated in the 1930s. Motor traffic is notable by its absence (partly because the photographer often worked on Sundays) and the trams (fairly uncommonly in the UK) reached well into the countryside as well as running through grim tenements. The newer vehicles illustrate the attempt to modernise the fleet before and after World War II and the ultimate failure of this policy as a large number of veterans soldiered on into their sixth decade. There is, however, little of historical value to be gleaned from the volume, which will find its rightful place on the bookshelves of tram enthusiasts.

The Wearing of the Green (a reference to the uniform of platform staff), however, has a lengthy text, much better chosen illustrations, informative captions and several appendices. The author is the son of a tramwayman and worked as a conductor whilst a student, so he is able to describe operational details and what it was like to be on the platform, information which would otherwise be lost. For instance, depot duty clerks clearly had a key role behind the scenes in despatching the trams; there were a huge number of special and short-working cars; traffic instructions could verge on the bizarre, such as the injunction against carrying loaded coffins. (Empty ones were presumably all right, but who was going to check!) There are some interesting details of social history, such as the huge numbers once employed in local factories (and carried by the trams) and the fact that before World War II all trams stopped to observe the two minutes' silence on Armistice Day. This reviewer was intrigued to learn how conductors led their vehicles by hand through the thick fogs characteristic of the period, having himself seen the same procedure in Hull. And was there really an inter-war plan to build tramlines between Glasgow and Edinburgh? The author has a quizzical but most readable style which, with the well chosen photographs, makes the book an interesting if not demanding read.

Richard Buckley, Sheffield