Chapter Title: Converging lines, dissecting circles: railways and the socialist ideal in London and Paris at the turn of the twentieth century

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16. Converging lines, dissecting circles: railways and the socialist ideal in London and Paris at the turn of the twentieth century

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Throughout the nineteenth century, railways in London and Paris were presented as instruments of urban change and social reform in line with the coincidences as well as the discrepancies between the interests of railway companies, on the one hand, and those of the municipal and local authorities of the two cities, on the other. In the process, the connections between densely built central and inner districts, constantly growing suburbs and the provision of affordable and rapid means of transport were redefined according to whose interests were at stake. The conception of an orchestrated railway development for the two cities involved formulating a co-ordinated plan which was necessarily subject to the conditions imposed by the inertia of administrative and business practices as well as the weight of the institutions which decided on the extent and type of what could be implemented.

In this chapter, I will look at the extent to which the railway plans produced in London and Paris towards the end of the nineteenth century were both a result and a constitutive part of the process of how the question of the public benefit was understood in the two cities. I will discuss the ideas behind one of the latest plans for the Métropolitain in Paris, before its construction at the turn of the twentieth century, and their relation to the municipal authorities' struggle for legitimacy. I will contrast these with the attempts to reorganize railway provision in London according to a co-ordinated vision and the common effort of the central authorities, a view put forward by figures such as Charles Booth. I will, therefore, present a relatively fragmented vision of the French capital against a distinctive example of the comprehensive rearrangement of housing and railways in London.

The 'city railway' in the English and French capitals

Since the 1830s, when discourses, visions and ideas of how to conceive of railways within London and Paris first emerged, the problem of severe street

congestion was articulated in close relation to metropolitan improvement and overall reform across institutional, legislative and social practices. Reformers such as Fl. de Kérizouet in Paris and Charles Pearson in London, for example, made their contemporaries aware of the need to devise an effective connection between housing and transport issues. Towards the 1860s, the planning and construction of the Metropolitan and District lines in London, and the several debates of the municipal and departmental councils in Paris, led to the realization of the possibilities inherent in the operation of city railway lines as an instrument for the development of the two cities. In London, the District line, the first section of which opened in 1868, was conceived as the southern part of an 'inner circle' which was to help relieve the streets in the city centre from their congestion by further differentiating between passenger services and goods traffic, for the most part handled by the main line companies. In Paris, the newly incorporated suburbs (1860) prompted the emergence of ideas concerning circles and transversals that were to connect the centre and periphery, to some extent reinforcing the division created by the city walls. A section of the suburban railway ring or Ceinture began operation in 1852, specializing in goods traffic and restricted to linking the suburbs that had no direct connection to the city centre. The introduction of new technologies in urban transport, and specifically electricity, constituted the key issue from the late 1880s to the 1900s. The 'tube' lines of London were conceived of as a construct of trains operated by electric traction and steel tunnels laid down deeper into the city's soil. The often rehearsed issue of connecting the polluted centre with the healthy suburbs continued to be an important part of the statements that promoters and authorities alike made in connection with the opening of the City and South London (later part of the Northern line) in 1890, the Central London in 1900, and the Bakerloo, the Piccadilly and subsequent tube lines built during the first decade of the twentieth century. In Paris, the first six lines of the city railway network built between 1898 and 1910 became a reflection of the dispute between the socialist ideals of the city council and the interests of the state and the main line railway companies. The boundary created by the city walls was replicated as a result of the dispute: main line regional railway services and the exclusively local new transport system were kept separate and disconnected.

Developments in railway transport in the two cities were determined by the co-ordination of the agencies and structures inherent in two clearly different contexts and the ways in which these changed during the nineteenth century. Despite the increasingly significant role of a new metropolitan authority, the London County Council (LCC), created in 1889, the predominant role of private initiatives seemed to contribute to

the generally fragmented organization of railways in London. In Paris, the course of the plans as they were built was largely characterized by the antagonism between the national, regional and local authorities involved. At the same time, all the projects and debates about how to design, execute and consolidate an effective city railway network for passenger services within the two cities demonstrated a profound dissatisfaction about how their growth seemed to exclude certain segments of the population, notably the working classes and the poor. Both Pearson and Kérizouet had identified this trend since the 1840s, outlining what they thought were the most effective ways to deal with its consequences. Not much appeared to have changed by the 1890s and 1900s, as the city railway plans continued to give place to dreams in their articulate and systematic visions of how to alter what past practices had created. How to translate those dreams and visions into the real blueprints of two modern cities was, therefore, at the core of the future of railway transport in the English and French capitals.

The socialist interpretation of railway interests: Paris

The range of city railway projects produced in Paris by the 1880s varied from circular lines or lines traversing the city from east to west and north to south, to more elaborate versions which included several means of traction, the combination of which constituted relatively comprehensive and sophisticated systems. P. Villain's '*Le 107ème projet de Chemin de Fer Métropolitain',* published in 1887, was among these. It consisted of seven different sections, including railway lines, funiculars, junctions and a central station next to the Hôtel de Ville for the exclusive use of passengers and postal services.[1] As with many earlier projects, Villain's vision remained confined to theories; but his ideas, like those of the men who had been and were still involved in the formulation of city railway plans since the 1830s, enhanced the body of expertise about the options available to the city and, more importantly, about how specific aspects of a plan could make it more feasible than others.

[1] The sections were, in order: (1) an external line penetrating Paris; (2) an internal line; (3) the line of Bois de Boulogne; (4) three funiculars – Gare de l'Est to Châtelet, Gare St. Lazare to Collège Chaptal, and Gare Montparnasse to Rue du Louvre; (5) a central station, next to the Hôtel de Ville, between the Rue de Rivoli and the river embankments, dedicated to post services and passengers only; (6) a line linking the central station, the Halles and the Hôtel des Postes, for goods traffic only and entirely underground (an additional goods terminal was planned in the Canal St. Martin, between the Rue de Faubourg du Temple and the Avenue de la République); and (7) junctions with main line railways. For a description of each section, see P. Villain, *Le 107ème projet de Chemin de Fer Métropolitain* (Paris, 1887) (extract from *Annales industrielles* (30 Oct. 1887), pp. 8–13); the design of the central station was based on the model of the new 'postal terminus' (*gare aux messageries*) of the Compagnie d'Ouest (see *Annales industrielles* (30 Oct. 1887), pp. 17–18).

According to Villain, two main conditions were particularly important in order to conceive of a coherent system of circulation for Paris: the availability of city spaces which could be used effectively for the design and construction of new transport lines; and the technical aspects related to the choice of traction and infrastructure. But there was another dimension, distinctly decisive and generally prevalent during the last quarter of the nineteenth century, namely, the political struggle between the municipal and national authorities that was to determine the execution of any city railway plan in the French capital.

In April 1886, the minister of public works, Charles Baïhaut, presented to the national authorities the bill (*projet de loi*) for a new city railway project.[2] After consultation with the municipal council, in May the project received the first notice of approval by the ponts et chaussées, the national corps of engineers. The project was then examined by a municipal commission appointed to assess the extent to which the plan responded to the transport and related needs of the city. Concern about how best to define these needs was one of the dominant features after the events of the Commune in 1871. Since that date, tensions between the national and municipal authorities had intensified: they would often find themselves adopting antagonistic positions, particularly with regard to projects such as the Métropolitain which was invested with significant symbolic value for the French capital.[3]

The commission highlighted the importance of choosing both a particular constructive system (whether on elevated viaducts or underground) and the type of labour to be employed in building it. Technical expertise and firsthand experience could be hired from cities where similar transport infrastructures had been built (Berlin, London or New York), but the commission insisted on employing local labour, clearly stipulating the requirement to observe measures which were characterized as 'protectionist and socialist'.[4]

After numerous exchanges between the municipal council and the minister, the project was legally divided into 'essential' and 'non-essential' lines. A bilateral agreement (*contrat synallagmatique*) for the first essential lines already existed between the state and the concessionaire, on the one

[2] The following account is based on the report by Lefebvre-Roncier to the municipal council (see Conseil Municipal de Paris (hereafter CMP), *Rapports et Documents* (1886), lxix).

[3] I discuss this in detail in ch. 3 of 'Polis of the metro: the introduction of the city railway in 19th-century London and Paris' (unpublished University of London PhD thesis, 2009).

[4] Other demands of the municipal council included workmen's fares, the use of national products and equipment for the construction works and the percentage of the foreign workforce (see the anonymous account in *Journal des économistes*, ser. 4, xxxv (1886), 148).

hand, and the state and the railway companies, on the other, and so any changes to these terms were difficult to implement.[5] Largely as a result of additional negotiations and municipal pressure, the left bank section of the circular line proposed in the plan, between the Gare d'Orléans and Trocadéro (crossing the River Seine and terminating on the right bank), was abandoned and opened to further study by the commission (see Figure 16.1). A revised layout was proposed after consultation with representatives of the *arrondissements* directly involved. The new line was to benefit the working classes and link the peripheral districts of the south (XIII and XIV) with areas such as Montparnasse and Maison Blanche, which generally lacked communication with the rest of Paris.

Lefebvre-Roncier, reporter to the council, stressed the importance of a change to the underground route originally proposed as it was to introduce a direct service to the market area of the Halles: a new 'central subterranean line' between the Gare St. Lazare and the Place de la République (considered earlier by studies of 1883) was subsequently added to the project and presented as one of the commission's achievements. According to Lefebvre-Roncier, by adopting the new line and receiving the final approval of the ministry (*gain de cause*) the project was invested with 'the definitive character of a true and very Parisian Métropolitain'. A western junction between the Ceinture and the 'nouvelle Ceinture' drawn, after consultation with the southern districts, from the Place de l'Étoile to the Porte Maillot, was also included in the new version of the project.

The effects of an economic crisis which started in 1882 were still apparent in 1886.[6] In Lefebvre-Roncier's view, however, there was 'a political and social interest' in the pursuit of an enterprise of such a scale and character in that, despite the vast capital required for its execution, the project could encourage 'the recovery of the job market ('reprise du travail') and the progressive return of the working classes to [their] well-being'. The need to consider and weigh local conditions regarding the employment of 'the

[5] As D. Larroque asserts, the combinations used in the contracts were 'particularly complex'; they incorporated, e.g., interest on capital guaranteed by the state and the tolls that the companies were to pay, and set revenues based on the traffic figures guaranteed by the companies (D. Larroque, 'Le Métropolitain: histoire d'un projet', in *Paris et ses transports XIXe–XXe siècles: deux siècles de décisions pour la ville et sa région*, ed. D. Larroque, M. Margairaz and P. Zembri (Paris, 2002), pp. 61–2).

[6] According to André, the end of the crisis, at least four years later, came when financial indicators fell to the minimum levels known during immediately preceding crises. Interestingly 1882 figures showed no effects on passenger traffic but only on the transport of goods (M. André, *Note sur les variations de la circulation dans les rues de Paris de 1872 à 1887* (Paris, 1888), pp. 34, 44). See also B. Marchand, *Paris: histoire d'une ville XIXe–XXe siècles* (Paris, 1993).

Figure 16.1. Chemin de Fer Métropolitain de Paris as amended for the session of 31 May 1886 of the municipal council. The ministerial project was subject to modifications introduced by the local authorities. Note the central full line connecting to the Halles, one of the changes presented as an achievement of the negotiations by the city authorities.

Source: Archives Nationales series F14 9183.

workers of all the Parisian official authorities' (*corps d'état*) had been made explicit to the ministry which was responsible for the execution of the works. The enterprise was thus to become a symbol which was 'republican, national, and communal at once'. Although executed within the territorial jurisdiction of the capital, the Métropolitain could be 'a grand national instrument of employment [which] will firmly cooperate in the renaissance of public prosperity', through the approval and support of the national authorities.[7]

Both the departmental and municipal councils issued their notices in early July. In a letter of 21 July 1886, Baïhaut demanded that changes be made to the municipal notice and so a modified version was produced on 6 August. A second bill was ready in October, with a railway commission reporting to the chambre des deputés on 27 October 1886. The project was eventually dismissed in July 1887 by the chamber, after a majority opposed the passing of the bill.[8]

The institutional structure of city council, regional prefect and the several national authorities, together with the economic and political elements of that structure, determined the kinds of interests which were at stake when city railway plans were produced, debated and rejected in the French capital. This turned the process into a seemingly endless debate with little or no prospect of a decision, and even less of its implementation.[9] Moreover, the seemingly articulate visions of the future of Parisian transport were diluted in an atmosphere of marked antagonism which was, in turn, a result of the friction between the institutional levels involved and the ways in which each exercised its influence. 'Such is our present condition', affirmed Yves Guyot in 1883, before becoming Baïhaut's successor:

> the two prefectures [of the Seine and police] always at war between themselves and with the Municipal Council – an enormous machine, unable to move without a friction by which it wears itself out without any useful result; wheels revolving in opposite directions; the public interest crushed and injured at every turn; gigantic efforts without result; nobody responsible for anything; a complete and hopeless anarchy;- this is what it has come to because the central authority is determined to be the master of Paris, and leave it but the shadow of municipal liberty.[10]

[7] CMP, *Rapports et Documents* (1886), lxix. 17.

[8] Larroque, 'Le Métropolitain', p. 68; for a detailed discussion of Baïhaut's project, see Larroque, 'Le Métropolitain', pp. 60–8.

[9] For a helpful scheme of the various bodies involved and how their separate agencies circulated in the institutional structure, see the 'Itinerary of a project of the Métropolitain of general interest' (Larroque, 'Le Métropolitain', p. 64, fig. 7); contrast with the scheme depicting the adoption of the municipal project (Larroque, 'Le Métropolitain', p. 82, fig. 14).

[10] Y. Guyot, 'The municipal organization of Paris', quoted in C. K. Yearley, 'The "provincial party" and the megalopolises: London, Paris, and New York, 1850–1910', *Comparative Studies in Society and History*, xv (1973), 84.

The seemingly irreconcilable dichotomy between the local interest concerned with the provision of a system exclusively devoted to urban traffic and the general interest associated with the national railway network and, therefore, the main line companies, developed into a conflict between the national establishment and the emerging autonomy of the local authorities. This conflict or antagonism hindered the implementation of any project before the opening of the first line in 1900.[11] According to Frederic Sauton, reporting on one of the several commissions created to evaluate the plans produced by the municipality and other parties, the process for implementing the city railway went 'from setback to setback and abandonment to abandonment'.[12] The question of how to unite under the precepts of one project the interests of the state, the city and private initiative was difficult, often placing political and economic interests in opposition.[13]

In November 1897, the general council of the ponts et chaussées declared the Métropolitain to be of a municipal character and, therefore, restricted to local interests, which to some extent provided an end to the debate.[14] Three amendments were made to the terms of the bill by the conseil d'état, the ministry of war and the council of the ponts et chaussées: first, the gauge of the rolling stock was changed from 2.10 to 2.40 metres in order to increase operational capacity; second, the gauge of rails supporting bigger trains was changed accordingly to 1.44 metres instead of the 1.30 metres initially proposed by the municipal authorities; and, finally, the conditions of labour were altered to ensure a minimum salary and limited working hours per day.[15]

The legal terms for the execution of the works were subsequently defined by the act of 30 March 1898 which further sanctioned the 'public utility' of

[11] For a summary of projects produced under the 'private initiative', see P. Reverard, *Des conditions d'exploitation du Chemin de Fer Métropolitain de Paris* (Paris, 1905), pp. 72–8.

[12] *CMP procès-verbal* (5 July 1889), quoted in A. Mitchell, 'Le métro: bataille technologique', in K. Bowie and S. Texier, *Paris et ses chemins de fer* (Paris, 2003), p. 133; see also Larroque, 'Le Métropolitain', p. 70.

[13] According to Larroque, the debate around the city railway and its interest, initiated again in 1889, was determined by wider structural issues in the general political context rather than the choice between local or general interests, specifically the question of 'the Republic or an authoritarian regime' (Larroque, 'Le Métropolitain', p. 69).

[14] For a detailed account of the process leading up to the decision, see Larroque, 'Le Métropolitain', pp. 80–7.

[15] See CMP, *Rapports et Documents* (1898), xxiv; see also J. Robert, *Notre Métro* (Paris, 1967), p. 25; S. Hallsted-Baumert, 'The Métropolitain: technology, space and the creation of urban identities in fin-de-siècle Paris' (unpublished New York University PhD thesis, 1999); Larroque, 'Le Métropolitain', pp. 87–8.

the project.[16] The deliberation around the act during the municipal session reflected how much disagreement and, at times, vicious opposition there remained among the city councillors. As the Seine prefect asserted, no project other than the Métropolitain had been subjected to such detailed study and debate by the various governmental bodies, yet once the debate seemed to have ended, further objections were found and disagreements fiercely expressed.[17]

The 1898 act established a city railway network of local interest, with trains operated by electric traction and focused on the 'transport of passengers and their hand luggage'.[18] The initial contract was granted to the Compagnie Générale de Traction, which associated itself with the Établissements Schneider du Creusot in order to build and operate the planned network, indicating a significant shift in the financial model. The new industries concerned with the production and distribution of electricity seemed to offer a novel challenge to the position normally occupied by the main line railway companies in terms of financing the project.[19] This would be accentuated further with the agreement between the final *concessionaire*, the Compagnie du Chemin de Fer Métropolitain de Paris (CFMP),[20] and the Société d'Électricité de Paris concerning the construction of the generating plant at St. Denis, in operation from 1906. Foreign capital, notably from the Belgian conglomerate of Général Baron Édouard Empain, was to become increasingly central to the operation of the network as the twentieth century progressed.[21]

[16] The term public utility had been used in connection with several other lines, such as the Grande Ceinture (1875) (see Larroque, 'Le Métropolitain', p. 50).

[17] For the prefect's statement, see *CMP procès verbal* (30 March 1898), p. 357. For further illustration of the conflicting processes, even after decisions had been taken, see, e.g., another report by Berthelot concerning the financing of one of the additional lines ('Établissement d'une ligne métropolitain complémentaire …', *CMP procès verbal* (1 July 1898), pp. 54–7).

[18] This is the first article of the act or 'Projet de loi adopté par la Chambre des Députés ayant pour objet la déclaration d'utilité publique du chemin de fer métropolitain' (see *CMP procès verbal* (30 March 1898)); see also E. Hubault, *Omnibus, tramways, Métropolitain, nord-sud: supplément au recueil annoté de lois, décrets, ordonnances, arrêtés, décisions concernant les transports en commun, etc.* (Paris, 1910), also quoted in Robert, *Notre Métro*, pp. 25–6; and Mitchell, 'Le métro', p. 142.

[19] Larroque, 'Le Métropolitain', p. 78.

[20] The terms of the transition between the initial concessionaire and the CFMP were considered and adopted by the city council during the session of 27 June 1898 (see Berthelot's report 'Constitution de la Société concessionnaire du Métropolitain', *CMP procès verbal* (27 June 1898), p. 835; and the subsequent deliberations during the same session (*CMP délibérations* (27 June 1898), pp. 463–4)).

[21] For a brief discussion of Empain's role in the provision of electricity for the Métropolitain network, see A. Beltran, 'Une victoire commune: l'alimentation en énergie électrique du Métropolitain (1re moitié du XXe siècle)', in *Métropolitain: l'autre dimension de ville*, ed. M. Merger and others (Paris, 1988), pp. 115–17.

The lines built between 1898 and 1910 covered the city from east to west and north to south while also reinforcing the circular route of the Ceinture, although following the external boulevards instead. The distance between rail tracks was the same as that of the main line railways, but the operational gauge remained different. Main line trains were practically excluded from the metropolitan network since the dimensions of the tunnels accommodated the city railway cars (2.40 metres wide) and not the national rolling stock (3.20 metres wide).[22]

To some extent the legal terms defined by the 1898 act represented a compromise between the city and the state, after the national authorities had succeeded in persuading the city councillors to preserve a standard gauge for strategic (military) reasons. The urban transport system ultimately built constituted in this sense an affirmation of local sovereignty against the exercise of influence and power by different state bodies. Furthermore, the earlier plans which had placed Paris as the central node of the national railway network in the 1840s were transformed by the decision to build a separate railway system within the city. Costs were reduced in the construction of the tunnels; direct junctions with the existing national and regional railway network were made impracticable; and national and urban traffic were rendered distinct, separate and disconnected from one another.[23]

On the other hand, the CFMP would become a significant referent in terms of the employment conditions of its labour force, which included: 'statutory employment, minimum salary, working hours reduced to ten, a resting day per week', full payment covering absent days due to sickness, and 'free medical and pharmaceutical service', among other things. This was considered a triumph by the municipal council, which at the time had a socialist majority. More importantly, and as Larroque suggests, this was 'the way to a social change without revolution', which would serve as an important precedent for new disputes later in the twentieth century.[24]

[22] See Robert, *Notre Métro*, pp. 25–6; N. Evenson, *Paris: a Century of Change, 1878–1978* (New Haven and London, 1979), pp. 105–6; Larroque, 'Le Métropolitain', pp. 87–90; Mitchell, 'Le métro', p. 143.

[23] The difference between the city railway network and the network of main line companies would increase as the 20th century progressed, regardless of initial plans to connect them. Larroque characterizes them as 'two parallel histories' joined only by 'the disappearance of the railway companies from the urban scene' and the consolidation of a regional transport service and subsequent creation of the Régie Autonome des Transports Parisiens (RATP) in the 1930s (see Larroque, 'Le Métropolitain', pp. 90–4). See also, G. Dupuy, 'Les stations nodales du métro de Paris: le réseau métropolitain et la revanche de l'histoire', *Annales de géographie*, dlxix (1993), 17–31.

[24] Particularly in sectors related to public transport and utilities such as gas and electricity (see Larroque, 'Le Métropolitain', pp. 86–7).

The contested understanding of the public benefit: London

The unanimous conclusion of two conferences held at Walworth, London in January and February 1901 was: 'That a complete system of transportation radiating from urban centres, and which shall be cheap, rapid, and under municipal ownership, is a primary step towards dealing with the housing problem'. The resolution could be applied to large towns and cities across Britain, but it was the situation in London that required the most urgent solutions. Charles Booth, whose work on the *Life and Labour of the People of London* provided one of the most detailed and comprehensive accounts of the living and working conditions of the population ever produced in relation to the English capital, was the conference's main speaker and a key advocate of 'Improved Means of Locomotion' as a way to solve the housing problem. According to Booth, the constant change in the patterns of residence and occupation across and within all London districts, the constant flow of migrants in search of work and life opportunities, the generalized lack of building space in the central and inner districts, and 'the requirements of a higher standard of life and health' among all social classes were the key factors affecting the housing provision of the capital.[25] Prosperity, he argued, was inextricably linked to these factors and constituted, therefore, an important part of the solution: 'as all the causes of pressure are resultants of prosperity, there can, at bottom, be no economic difficulty in dealing with the evils of over-crowding. The difficulty is one of administration only … The question is solely in what way or ways the Public Authorities should interfere; how far they should go in any direction; and how the cost of what they undertake should be borne.'[26]

Booth's proposal consisted of 'a large and really complete scheme of railways underground and overhead, as well as a net-work of tram lines on the surface; providing adequately for short as well as long journeys. A system', he said, 'extending beyond the present metropolitan boundaries into the outskirts of London, wherever the population has gone or may go'.[27] Contrary to what seemed the general consensus of parliamentary sessions at the time, Booth's scheme subordinated underground to overhead lines and separate interests in the operation of private lines to the public function of the municipal authorities, in other words the LCC. The most important matter was to consolidate affordable means of transport which would make adequate and sufficient housing accessible to the entire London

[25] This and the previous quote are from London School of Economics and Political Science, Archives (hereafter LSE), Booth Collection, Charles Booth, *Improved Means of Locomotion as a First Step towards the Cure of the Housing Difficulties of London* (1901), p. 10.

[26] Booth, *Improved Means of Locomotion*, p. 11.

[27] Booth, *Improved Means of Locomotion*, pp. 15–16.

populace. In this respect, Booth's ideas were to become part of the broader concern about the role railways could play in relation to social reform and metropolitan improvement, which characterized discourses and debates in parliament and other specialized London circles throughout the nineteenth century.

Booth's argument in favour of a centralized authority was not a claim for centralization but rather for a scheme which was to build upon the existing trends of decentralized communities that preserved a connection to the city centre: 'Such centres are to be found now on all sides of London, with brilliant shops, perhaps a Town Hall, and probably a theatre; streets full of people; and always the jingle of a tramway line. The growth of such local life in London during the past decade is very noticeable'.[28] As a result of his reading and understanding of the transformation which London experienced at the time, Booth conceived of a generalized plan that would allow the metropolis to grow in an orderly fashion in all directions along transport lines connecting the periphery to the centre, precisely the type of plan that the often disjointed efforts of private railway companies frustrated.

The trend of the city's constant growth and new communities becoming part of an ever-extending metropolitan construct was a recurring theme in the English capital, particularly during the second half of the nineteenth century. H. G. Wells, for example, understood means of locomotion, especially railways, as instigators, indeed direct causes, of the new types of relationships which seemed to develop between individuals and the communities and localities of which they were a part: 'A large proportion of our population to-day, a large and an increasing proportion, has no localized interests at all as an eighteenth-century person would have understood locality'.[29] In Wells's view, the inefficacy of traditional structures and practices in relation to the new processes taking place within and without urban and rural communities was a central element of the situation:

> if, while this expansion of the real communities goes on, you keep to the old boundary lines, you will find an increasing proportion of your population straddling those lines. You will find that many people who once slept and worked and reared their children and worshipped and bought all in one area, are now, as it were, delocalized; they have overflowed their containing locality, and they live in one area, they work in another, and they go to shop in a third.

[28] Booth, *Improved Means of Locomotion*, p. 18.

[29] H. G. Wells, 'A paper on administrative areas read before the Fabian Society', appendix to *Mankind in the Making* (1906), p. 161.

> And the only way in which you can localize them again is to expand your areas to their new scale.[30]

The use of terms such as delocalization and decentralization was related to the size of London and, more precisely, to the way in which relatively autonomous villages and their communities had become part of the metropolis. Transport lines constituted an alternative means for consolidating a coherent whole out of separate and distinct parts. The question was thus not only whether or not new facilities provided sufficient and adequate connections, but also, and perhaps more importantly, how to make sense of the new relation between home and workplace and its effect upon the administration and space of the English capital.

Booth's scheme consisted of '5 lines radiating outwards from the Bank' connecting at various points, extending from the outlying districts and linking up to the existing regional and city railway lines: 'the resulting network would resemble a spider's web and every part would be readily accessible from every other part'.[31] Fares should be uniform and cheap[32] while the frequency of trains should be increased to three minutes, minimizing stoppage times.[33] Stops would be at fixed points, providing pedestrian crossings; speed increased only in direct relation to safety; widening of thoroughfares would be recommended if and when necessary.[34]

A significant objection to Booth's scheme was the longstanding problem of how best to join public and private interests, particularly in relation to the issue of land and tax rating. Agreements were in place concerning the interests of local councils and landowners, which would be challenged by the execution of the plan.[35] Moreover, Booth's ideas also involved a new

[30] Wells, 'Paper on administrative areas', p. 162. For a brief discussion of Wells's ideas, see K. Young and P. Garside, *Metropolitan London: Politics and Urban Change 1837–1981* (1982), pp. 109–11.

[31] See LSE, Booth Collection, A 55, the (draft of a) 'paper on law on transport improvements in connection with its housing problem' read on 29 March 1901 before the Political Economy Club, entitled 'Could the housing problem of London be solved by improved means of communication?' (hereafter 'Could the housing problem of London be solved?'), p. 13; for a general sketch of the lines, see 'Could the housing problem of London be solved?', p. 12.

[32] 'Could the housing problem of London be solved?', pp. 12, 14; a preliminary breakdown of fares according to four types of service, zones and/or systems included: 'any distance on the main surface lines or on the underground inner circle', 'any distance on the surface connecting lines', 'the whole tube system' and 'the outer metropolitan railway system' ('Could the housing problem of London be solved?', p. 14).

[33] In relation to the latter, Booth affirmed, 'we have a good deal to learn from the Americans' ('Could the housing problem of London be solved?', p. 15).

[34] 'Could the housing problem of London be solved?', pp. 15–16.

[35] 'Could the housing problem of London be solved?', pp. 20–2.

socio-economic model for London and British towns more widely: 'It is quite possible to imagine all organized methods of locomotion (like all roads) as State or municipal monopolies, without any serious shock to the individualist basis of life; but', as Booth asserted, 'short of the wildest scheme of socialism, quite impossible to conceive of arranging the entire housing of the Nation on that plan'.[36]

The fear of encouraging monopolies through municipal or state intervention related to the generalized resistance against claims for centralization and co-ordination across all districts in London.[37] At the same time, the interpretation of the public benefit was an important element in deciding whether or not railways, and transport facilities at large, might be turned into instruments in the hands of government for solving housing problems.

The public benefit was related to the type of services railway companies were to provide, which, if somewhat restricted to a transport facility, remained inextricably linked to how housing evolved and changed, particularly in the English capital. The connection between transport and housing issues, on which figures such as Charles Booth insisted, had become particularly clear towards the end of the nineteenth century.[38] But how best to realize that seemingly obvious connection in the face of the inertia and obduracy of institutionalized practices proved to be a fundamental problem: 'Private enterprise will seize on the most profitable routes and reject all others. Public enterprise will look to the profit on one part of the system to help those not less necessary parts (from a public point of view) of which the working is less, or perhaps not at all, profitable'.[39] The existing model according to which companies sought official powers for the operation of their lines generally hindered any attempts at co-ordinating private and public interests. This was precisely the model that characterized railway policy in Britain throughout the nineteenth century: focusing on the protection of individual liberties led private companies to enter a domain that was to restrict the formation of monopolies. The public benefit in this context was perceived as a relatively fair realm, open to all, and in which competition would stimulate growth

[36] Booth, *Improved Means of Locomotion*, p. 19.

[37] For a thorough discussion of this, see Young and Garside, *Metropolitan London*.

[38] Several royal commissions and select committees were appointed to this end (see, e.g., *Notes of Conference held at the Board of Trade on 29th of June 1893, with Representatives of the London County Council and Representatives of the Railway Companies Having Termini in the Metropolis* (1894)).

[39] Booth, *Improved Means of Locomotion*, p. 22.

– even though outcomes often demonstrated the opposite.[40] The disparity between privately operated railway lines competing against each other and the need to conceive of transport and housing issues as a coherent whole was a direct consequence of such an understanding of the public benefit.

Between May and July 1901, ten different schemes were examined by a joint committee of the two parliamentary Houses (Commons and Lords) appointed to report on the situation of London Underground Railways. The schemes included the proposed 'loops' of the Central London at both ends of the line, which were to ensure the replacement of electric locomotives with a multiple unit system; two different bills for the Charing Cross, Euston and Hampstead; the City and South London's extension to Islington and Euston, presented as a separate bill from an independent company in order to ensure capital subscribers;[41] the King's Road; the West and South London Junction; two bills that were to provide services in the north-east, the City and North East Suburban and the North East London; and three lines which sought powers to connect the areas in and around the City and West End with the residential districts further west, namely the Brompton and Piccadilly Circus, the Charing Cross, Hammersmith and District, and the Piccadilly and City.[42]

The committee reported on the constructive techniques and types of technology that the new schemes proposed, as well as on issues related to 'present and probable future traffic' and whether or not extraordinary measures were needed 'for the protection of the owners, lessees, and occupiers of properties adjacent to underground railways from possible damage and annoyance'.[43] Property and prospects relative to the sustained increase in figures for metropolitan traffic remained central to the debate about the implementation of new city railway lines and their relation to the suburban expansion of London. In addition, the provision of the 'best routes' for underground communication was organized according to: first,

[40] The French and British situations provide an interesting contrast in that the definition of public benefit was determined by, in the case of France, a set of relatively clearly identified collective goals to which individual efforts were subordinated and, in the case of Britain, the preservation of equal grounds for individual efforts leading towards a collective goal, the very definition of which was subject to numerous interpretations (see, e.g., F. Dobin, *Forging Industrial Policy: the United States, Britain, and France in the Railway Age* (Cambridge, 1994)).

[41] See P. Holman, *The Amazing Electric Tube: a History of the City and South London Railway* (1990), pp. 51, 54.

[42] For the list and comments on each scheme, see Report from the Joint Select Committee on London Underground Railways (Parl. Papers 1901 [Cd. 279], pp. vii–ix).

[43] Report from the Joint Select Committee on London Underground Railways, p. v.

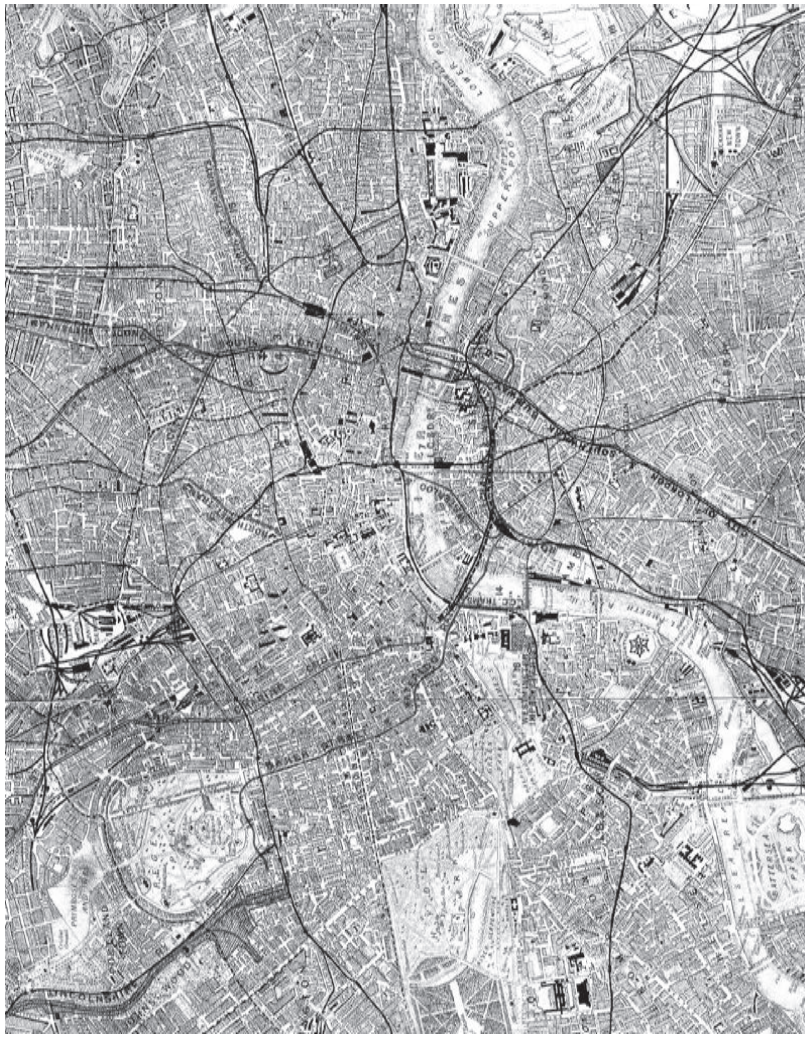

Figure 16.2. Detail of the several railway and tramway lines proposed in London towards the end of the nineteenth century, most of them operated by electric traction.

Source: *Report upon Railway and other Schemes Affecting the County of London* (London County Council, 1892).

future extension 'into the country' and its relationship with existing demand and means of transport; second, the responsibilities and obligations of the operating companies towards the public and the legal means to ensure they fulfilled them; third, the granting of '*locus standi*' to the City, the LCC and other councils regarding opposition to schemes which might affect or interfere with their jurisdiction; and, finally, operational aspects of the layout of the lines' termini and their junctions. The committee also confirmed one of the recommendations of a previous report (from 1892, see Figure 16.2) concerning 'way-leaves in the case of [both] private property' and public ways, as well as noting that the underground system was to maintain its premise of alleviating as much as possible and at designated points the problem of severe street congestion: 'Interchange stations should, where practicable, be placed at all points where underground lines cross one another, and should be connected by subways so as to facilitate the passing from one system to another under ground'.[44] An example of such an underground connection was readily available at the Bank station of the Central London, where a 'City subway' connecting the Bank of England, the Royal Exchange and Mansion House had been built.[45]

On the whole, the committee's report commended all the bills.[46] To conclude, however, the commissioners expressed their concern about whether and how to bring all underground lines together, 'subject within certain limits to the control of a central authority'.[47] The City Corporation and the LCC seemed to agree on this point, given the importance and interrelation of underground lines and suburban expansion and their influence on traffic and financial prospects. Both institutions believed that the issue of a central body regulating the various schemes put forward during parliamentary sessions was a question to take seriously. But uncertainty remained as to what kind of authority was required and how it would exercise effective control over fares which, according to the existing financial model, were subject to the estimated revenues to be paid on capital. The City, the LCC and the county councils could take an active part in this by participating in the construction of the lines, as in the model of the Light Railways Act: 'Such powers would enable the councils to encourage by subsidy or

[44] All the points are in Report from the Joint Select Committee on London Underground Railways, p. vi.

[45] See *The Times*, 23 Nov. 1899, p. 12; also a brief notice after the opening to the public of five out of the seven staircases on 8 Jan. 1900 (*The Times*, 9 Jan. 1900, p. 7).

[46] Only the east end loop of the Central London, at Liverpool Street, represented some difficulty and needed further examination (see Report from the Joint Select Committee on London Underground Railways).

[47] Report from the Joint Select Committee on London Underground Railways, p. ix.

otherwise, the prolongation of railways into districts thinly populated, and therefore suitable for the relief of congested districts, whereas, in many cases at any rate, a public company would not feel justified in extending their line till the population became greater'.[48] If not entirely explicit, the committee conceded the importance of co-ordinated efforts, which had consequences for traffic, suburban expansion and the provision of affordable and sufficient means of transport, particularly for the working and poorer classes. What is more, with their report the committee produced a significant statement encouraging the creation of a centralized model and, therefore, recognizing the need to overcome the administrative fragmentation and inertia of institutional and business practices which determined how the Metropolitan, the Metropolitan District, the City and South London and the Central London had been built in the English capital.

By the time the 1901 commission was reporting, a clear notion of the main, secondary and subsidiary systems of London transport was not attainable. Four city railway lines were in operation, with two different technologies: the Metropolitan and District were operated by steam locomotives while the City and South London and the Central London were worked by electric traction. Furthermore, the suburban services of main line companies made it difficult, if not impracticable, to distinguish between exclusively internal traffic and the traffic of the outlying districts communicating with the centre and inner districts; a difference that, according to J. Greathead, chief engineer of the City and South London and the Central London, was a condition for the successful operation of lines allocated to London traffic.[49] On the streets, omnibuses, tramways and an increasing number of bicycles and motor cars made intensive and often conflicting use of the urban landscape. Companies following their own practices and institutions responding to their own interests frustrated any attempts to establish a transport system which could be both effective and coherent.[50]

[48] Report from the Joint Select Committe on London Underground Railways, p. ix. For a different discussion of the report, see T. C. Barker and M. A. Robbins, *A History of London Transport: Passenger Travel and the Development of the Metropolis*, ii: *the 20th Century to 1970* (1974), pp. 65–7.

[49] J. Greathead, evidence of a select committee from 1892, quoted in J. Simmons, 'The pattern of tube railways in London: a note on the joint select committee of 1892', *Journal of Transport History*, vii (1966), 236.

[50] This was an issue identified by many. John Robinson, representative of the London United Tramways and proponent of the London United Electric Railway, for example, stated that one of the main problems in the kind of operation proposed by the LCC, and to some extent recommended by the 1901 committee, was the degree of administrative fragmentation, whereby a 'multitude of councillors, and of Councils, might have projected

Neither Booth's scheme nor the idea of a centralized authority for railway transport, as recommended by the 1901 committee, materialized. However, the need for co-ordination and the possibilities of considering city railway lines as a planning instrument were to become more apparent as the twentieth century progressed. The following year, in 1902, the Underground Electric Railways of London was formed, obtaining powers to build the rest of the city railway lines that would complete the first unified transport network operated by a single company.[51] The vision of an integrated whole was thus the result of existing practices, namely, private companies whose emphasis on profit, more often than not, was the result of vested interpretations of the public benefit.

Conclusion

The relation between railway projects and socialist ideals was an important part of the ideological and physical transformation that London and Paris experienced at the turn of the twentieth century. Visions of new cities were devised in the process that challenged existing political and socio-economic models and practices in the two capitals. But the irreconcilable tension between co-operation and competition, as well as the effects of broader issues of social reform and metropolitan improvement, made the translation of these visions into practice a difficult affair, however evocative were the ideas proposed. Traditional conceptions of the administration and general understanding of the space and functions of the two cities were contested in the process. Yet, the visions remained constrained by the conditions of their present, in turn subject to unavoidable dependencies upon their pasts.

By 1910, in London there were seven city railway lines operated by four different companies using two technological systems, steam locomotion and electric traction. In Paris, the CFMP operated a city railway network consisting of six lines, limited to local traffic and fully worked by electricity. The two systems constituted fairly comprehensive urban transport networks:

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and constructed each its own bit of line … Each little Pedlington would have its staff of Parliamentary agents, engineers, and contractors, each one would demand its share of the profit, if any could arise, from such a hugger-mugger of ownership and management. The accounts would be voluminous, and their accuracy would be practically impossible'; and so the central question about city railways was whether 'they might have got these fragments operated as one system'. Robinson's plan consisted of an extensive system which combined 'light' and 'tube' railways directly connected to the existing lines operated by the company that he represented (see J. Robinson, 'Electric traction: London's tubes, trams, and trains, 1902', *Journal of the Society of Arts*, l (1902), 419).

[51] For a detailed discussion of the Underground Electric Railways of London and the role of Charles Yerkes in its creation, see Barker and Robbins, *History of London Transport*, pp. 61–84.

their structure and operation differed substantially from other means of transport, in the options available to commuters, regular travellers, tourists and visitors alike in using a differentiated space, underneath and above the streets. Moreover, beyond their contribution to the relatively effective circulation of passengers, the city railways were perceived and often used as agents of change that could reverse some of the cities' most pressing problems.

In London, Charles Booth was among the key figures who tried to persuade the authorities, companies and the public at large of the need for a railway system and of the sound benefits of a central vision compared with the execution of separate schemes. The housing problem could be alleviated by means of new transport networks, which would make the new districts in the outskirts accessible to the less privileged. The execution of the plan was best conceived of as an exercise of the LCC. But co-ordination and orchestrated development came under the aegis of private businesses and not the recently created metropolitan authority. A direct consequence of this was the over-provision of city railway services in certain areas and the dearth of services in others. The contrast between the well-served central districts and West End and the almost complete absence of these facilities in the east and north-east clearly illustrated this. In Paris, the municipal council used the Métropolitain as a symbol against which to establish its own identity. Resistance to the attempts of railway companies to extend their lines further into the city centre was countered by the conception of a systematic plan that covered Paris from east to west and north to south. This plan was confined to the space within the city walls, however. The circle that was to join the interests of the republic, the nation and the commune developed into a categorical distinction that separated rather than brought together clearly conflicting interests.

The definition and interpretation of the public benefit were important elements in the process. The arrangements in place between the individual railway companies and between the companies and the local or national authorities determined the conception, operation and management of railway lines in London, where the creation of a system required an overarching vision short of the appropriate means to implement it. In fact, the convergence of competing lines would first take place through the initiative of a private company, the Underground Electric Railways of London. The Parisian city railway was systematic from the outset. Its execution, on the other hand, demonstrated the extent of the antagonism between local, regional and national authorities and how the several interpretations of the public benefit developed into the conflicting exercise of diverging influences. The exclusion of the national railways from the

local network was echoed by the triumph of the municipal authorities in establishing the conditions which would make the Compagnie du Chemin de Fer Métropolitain de Paris a model of employment.

The city railway was, therefore, both a project that encapsulated alternative visions of the futures of the two cities and an infrastructure project that transformed London and Paris by creating a differentiated layer for the exclusive use of passengers circulating across their inner, central and outer districts. It was a reality which is still with us today. But it is also a regressive dream of changes which are yet to come.