

## Railways and civilization

In the UK there is currently a great deal of debate about “HS2”, which would be the second purpose-built high-speed railway in the British Isles (HS1 being the line from London to the Channel Tunnel). It is one of three big infrastructure projects under consideration, the other two being the Hinkley Point C nuclear power station and London airport expansion. HS2 would require by far the biggest investment, conservatively almost 60,000 million pounds sterling, whereas the other two are estimated to cost around 20,000 million pounds each (that is the cost of expanding Heathrow; Gatwick would be about half that but the cost of building a brand-new airport in the inner Thames estuary could exceed that of HS2). Whereas France, with a population density less than half that of the United Kingdom, has actively developed its equivalent programme of *trains à grande vitesse* (TGV) for the past 35 years, it is a much harder decision for crowded Britain to take. Hence, whereas the TGV costs about 7 million pounds per km to build, HS2 is projected to cost about 10 times more. Furthermore, even now Britain has a much denser (per unit land area) conventional rail network than France (and 50 years ago it was about twice what it is today), and it is presently the trend to reopen, or consider reopening, parts of the former network.

Whereas the case for building HS1 was primarily about speed — the existing links were rather slow — the reason for building HS2, which will provide a route from London to Birmingham and then on to Nottingham, Manchester and other major northern cities, is primarily to provide additional capacity. All the major cities on its proposed route had two or more mainline links to London prior to the Beeching “axe” that fell in the late 1960s—Birmingham from either Euston or Paddington, Nottingham from either St Pancras or Marylebone, and so forth. Curiously, reviews of Britain’s railways have, typically, looked at strictly financial criteria. According to the 1963 Beeching report *The Reshaping of British Railways*, duplicate routes were deemed to be redundant. In what amounted to little more than an exercise in accountancy, redundant elements were identified and eliminated. In Birmingham, for example, one of the two major stations (Snow Hill, Figure 1) was closed. The legacy of this lack of long-term vision is nowadays acutely felt over much of the network. Incidentally, Snow Hill was architecturally more distinguished than its rival, New Street, a cramped, ugly station that is much too small for present traffic needs.



Figure 1. Birmingham Snow Hill station ( British Railways’ Western Region) in 1957.

It is above all in the lack of breadth and long-term vision that the deficiencies of the Beeching report are most apparent. As Lord Stonham remarked,<sup>1</sup> “Dr Beeching was not allowed to spare a thought for the economy of the country as a whole”. Since Beeching was a physicist, one might have thought that would have had some appreciation of the nature of a *system*, which the railway is *par excellence* (implying that one cannot remove parts of it piecemeal without an adverse effect on the entire network), and that he might have had some inkling of the sequential minimization of entropy loss, a manifestation of Fermat’s principle of least action, which, when applied to the present problem, might have suggested that the most obviously uneconomical elements might have to be *temporarily* closed. Unless one were prescient enough to know that they would *never* again be needed, it would have been prudent to at least retain the land, permitting later revival. But it was the spirit of that epoch that the railways had to “pay their way” and, moreover, they were perceived as being inherently old-fashioned and in decline. Regarding the former, ironically enough, the accounting itself was highly questionable, as was its context—no equivalent exercise was undertaken for Britain’s roads.<sup>2</sup>

The subsequent (1983) Serpell report *Railway Finances* was even more uncompromising in its narrow focus on financial savings and it was heavily criticized for failing to even attempt to use cost–benefit techniques. Whereas the 1955 British Transport Commission report *Modernisation and Re-Equipment of British Railways* (on which the Beeching report drew heavily) was quite visionary in its outlook (“it aims at producing far-reaching

<sup>1</sup> *House of Lords Hansard*, Ser 5, vol. 249, col. 331 (2 May 1963).

<sup>2</sup> See E.R. Hondelink, *Review of Dr. Beeching’s Report The Reshaping of British Railways*. Northwood, Middlesex: The Great Central Association (1965) and the speech by Lord Stonham (loc. cit.).<sup>1</sup>

benefits for the economy of the country as a whole and for the better ordering of its transport arrangements”<sup>3</sup>), and recognized that “the public goodwill that will follow from improved services” (¶9) was important, though not quantifiable, the Serpell report actually considered that “travel itself is a disbenefit” (Part II, ¶2). By that time the social costs of line closures were recognized, but it was already too late to rescue most of the lines that had been lost by then.

Railways occupy a special place in the history of mankind because they are by far the largest machine ever developed and, *pace* Spengler [1], machines occupy a special place in man’s development. Mankind was fortunate that the Victorian railway (and other) engineers “spent their whole energy on devising and superintending the removal of physical obstacles to society’s welfare and development” and that “the thought of making man’s dwelling place more commodious cast into insignificance anticipations of personal enrichment” [2]. Figure 2 shows the interior of one of the Pullman trains introduced in 1960 (and withdrawn in 1973) between London and Birmingham/Wolverhampton and Bristol on British Railways’ Western Region. The impression of civilized comfort belies the notion of travel being a disbenefit. Let it be thought that the design was unrepresentative, Figure 3 shows a third-class dining compartment on the Great Western Railway in the late 1930s. The value of *civilized comfort* in enhancing the productivity of travel—to the extent that, contrary to the assertion of the Serpell Report that “travel is ... not an end in itself”, one might deliberately undertake a journey in order to finish a pressing piece of writing—is completely unrecognized in the various reports cited. Shortly after having been appointed as Chairman of the Board and General Manager of British Railways’ Western Region, Gerard Fiennes remarked that “Much of the business of the Thames Valley was carried in mainline trains weighing around 400 tons”. As an economy measure, these were replaced by diesel multiple units in which “we can neither read nor write nor sleep” [3]. There is clearly a price to be paid for these “economy measures”. The real cost may, in fact, be unquantifiable—a combination of incremental losses of productivity for all passengers both during the journey itself and during subsequent activity in the workplace after an uncomfortable journey, and the loss, now and again, of flashes of inspiration to the odd individual passenger. This mistake, sadly, continues to be repeated, to the detriment of national productivity and well-being. As perhaps the most recent example, austerity Siemens Class 700 trains have just been introduced on the Bedford–London–Brighton route in southern England—

a journey typically lasting 2.5–3 hours. Compared with the Bombardier “Electrostar” (Classes 377/387) electrical multiple units they replace, they lack the basic amenities of tables, reading lights, coat hooks, armrests, power sockets, carpets etc.; they are styled like short-distance metropolitan railway carriages, arranged to maximize standing room rather than seating.



Figure 2. The interior of a British Railways’ Western Region Pullman train in the early 1960s.

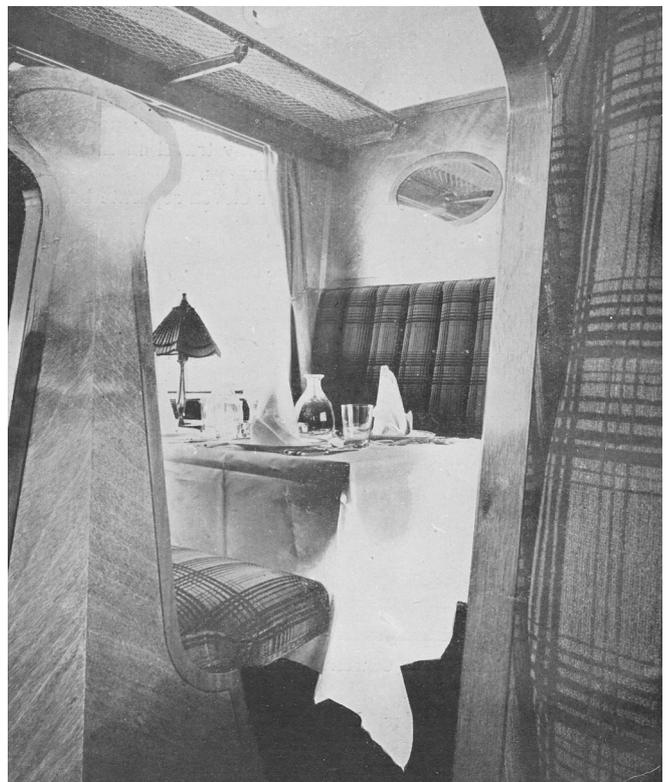


Figure 3. A third-class dining compartment on the “Cornish Riviera” train of the Great Western Railway in the late 1930s.

<sup>3</sup> Quoted by Lord Stonham (*loc. cit.*).<sup>1</sup>

This phenomenon, which is, at root, failure to recognize the importance of goodwill, can be readily generalized. For example, it is currently being regretfully debated why the University of Basel, especially in the humanities faculties, nowadays lacks internationally renowned luminaries like Friedrich Nietzsche or Karl Barth, even though it self-declares itself to be “particularly strong in economics, philosophy and the social sciences”.<sup>4</sup> Since the introduction of the new law of 1994/5, the University gained a high degree of autonomy from the city of Basel and became responsible for its own administration. There followed a gradual introduction of a kind of “new public management” in the administration of the University, to the detriment of traditional academic values. As a result, being a University professor has become deeply unattractive.<sup>5</sup> Underpinning this transformation, in 2014 the University launched an MBA in academic management (even though the University lacks a business school; the course of study is actually led by an egyptologist). Revealingly, the 1995 *Habilitationschrift* of Andrea Schenker-Wicki, appointed last year as Rector, was entitled *Evaluation von Hochschulleistungen, Performance Measurements und Leistungsindikatoren*. One can scarcely imagine that the thesis was a damning indictment of these measurements and indicators, which have, twenty years later, become well-nigh universal. Only the prestige associated with the great antiquity of places like Oxford or Cambridge, or the great affluence of places like Princeton or Harvard, may compensate for the

detriments of the measurements and indicators, to the extent that internationally renowned luminaries might still be persuaded to work at a university. Otherwise, nowadays the main purpose of a university seems to have become the offering of career opportunities for mediocre scholars to become administrators.<sup>6</sup>

Returning to HS2, it seems to be rooted in the mentality of travel being, intrinsically, a disbenefit. It recalls the Swissmetro project, in which superfast trains supported by magnetic levitation running in partially evacuated tunnels were proposed to connect the major Swiss cities. Anything more likely to discourage travel can scarcely be imagined—at least such discouragement will tend to solve the problem of undercapacity of travel infrastructure! But if there is continuing willingness to make a substantial national investment in the British railway network, the average cost of reopening previously closed sections seems to be around 5 million pounds per km, hence a far greater length could be usefully bought into service than with HS2.

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#### REFERENCES

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2. A. Weir, *The Historical Basis of Modern Europe*, p. 394. London: Swan Sonnenschein, Lowrey & Co. (1886).
3. G.F. Fiennes, *I Tried to Run a Railway*, p. 104. London: Ian Allan (1967).

<sup>4</sup> Th. Pflüger, Research in the spirit of sustainability. *Uni Nova* (01/2015).

<sup>5</sup> Cf. Matthews, P. Why be a Don? *Oxford Magazine*, Noughth Week, Trinity Term (2005) 4–5.

<sup>6</sup> Cf. Ramsden, J.J. Integrity, administration and reliable research. *Oxford Magazine*, Noughth Week, Trinity Term (2012) 6–8.